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Contents:

Spotlight	676 - 677
A.A.Troitzky - founder of the contemporary chess study	677 - 691
Diagrams and solutions:	
3rd Hero-Town's Match	691 - 693
Lenin 120	693 - 697
Rheinland-Pfalz and Europa-Rochade '91/'92	697 - 701
Wola Gulowska '94/II	701 - 702
Molodoy leninets '88	703 - 706
Bimov MT of Molodoy leninets '89	706 - 707
Phénix '88/'90	707 - 710
Schakend Nederland '91	711 - 713
Marwitz MT Schakend Nederland '92	713 - 716
Report on the 28th FIDE PCCC meeting in Turku	716 - 717
Reviews and announcements	717 - 718

EG 117 errata:

- 10006: The black king should be on b3 instead of c3
- 10007: The black bishop should be on h6 instead of h3
- 10011: The white pawn should be on b2 instead of c2
- 10013: The white king should be on g4 instead of h4

Spotlight by Jürgen Fleck

Let's start with some odds and ends:

EG 15

No 740, **I.Krikheli**. According to EG 22 this first-prize-winner is unsound, but the alleged dual 1.Rd8 fails to 1.... Rc3 2.Kb7 (2.Kb6 Kf6) Ke4 3.Rd7 Rc5 and black wins.

EG 79

No 5491, **A.Koranyi**. This first-prize-winner is unsound: 3.... Kc7 4.Kh4 Sd5 wins for black.

EG 94

No 6963, **V.Dolgov**. A remarkable case. Apart from the finale (known from Birnov) virtually everything is faulty. I found 7 defects:

- 1.... Kf2 (for ... Rc1+) wins for black: 2.Re8 (2.Rc3 Se7 3.d6 Rh5+) Rc1+ 3.Kb6 Rb1+ 4.Ka6 Ra1+ 5.Kb6 (5.Kb7 Sd4 6.d6 aSb5) Se7 6.d6 eSc8+ 7.Kc7 Sb5+.
- 1.... Sb8 wins for black: 2.Re7 (2.Re8 Sd7+ 3.Kd6 Rh7, 2.Rb3 Sd7+ 3.Kd6 Rh7 4.Rb7 Sc8+, 2.Ra3 Rh7, 2.Kb6 Rh7) Sc8 3.Re8 Kf2.
- 2.Re8 draws: 2.... Sb7+ (2.... Sf7 3.Re7) 3.Kb6 Rh7 (or ... Sb5) 4.Rf8+ and 5.Kxa7.
- 2.... Rh7 followed by either ... Sb7+ and ... Sd6, or ... Sc8 and ... Sb7+ wins for black.
- 2.... Ke2 wins for black: 3.Rb8 (3.Kb6 Rh7) Sf7 4.Re8+ (4.Rb7 Rc1+ 5.Kd4 Sd6, 4.Kb6 Ra1 5.Rb7 Sd6, 4.d6 Rc1+ 5.Kd5 Rd1+) Kd3 5.Re7 Rc1+ 6.Kb4 Rb1+ 7.Ka5 Sd6.
- 3.... Rh7 (for ... Sc8+) wins for black: 4.Rc3 Rb7+ 5.Ka6 Sb5 6.Rc8 Sc7+ 7.Ka5 Sf7.
- 5.... Sg6 wins for black: 6.Rb8 Se5+ 7.Kc7 eSf7.

EG 99

No 7735, **G.Nadareishvili**. Another false claim of unsoundness of a first-prize-winner: EG 102 gave the the line 5.Rxc3 dxc3 6.Sd4 c1Q 7.Se2+ Kf1 8.Sxc1 Sg6+ 9.Kg7 Sxe7 10.Kf6 Sc6 11.Ke6 Ke1 12.Sa2 c2 13.Sb4 draw, but better is 11.... c2 12.Kd5 Sa7 13.Kc4 Ke1 and now both 14.Kd3 Kd1 15.Sa2 Sc6 16.Kc3 (16.Sc3+ Kc1) Se7 17.Kd3 Sd5 18.Kc4 Sf4 19.Kc3 Se2+ 20.Kb2 Kd2 and 14.Kb3 Kd2 15.Kb2 Sb5 16.Sb3+ Kd1 17.Sc1 Sc3 18.Sb3 (18.Sd3 Kd2) Se2 win for black (database-checked).

EG 116

No 9816, **J.van Reek**. There is a dual win: 5.h5 a4 6.Sd5 Kxd5 7.h6 a3 8.h7 a2 9.c4+ Kxc4 10.h8Q.

No 9860, **V.Kovalenko**. Note i) is faulty: after the given 5.Kh3 Rg1 6.Kh2 Rg4 white wins by 7.Sf5+ Kxf8 8.Ra8+ Kf7 9.Sh6+ and 10.Sxg4, pointed out by Marco Campioli (Italy). Better is 6.... Rg5, which draws after 7.Sh7 Rh5+ 8.Kg3 Rxb7 9.Ra7+ Kd8 10.Rxb7 stalemate. Compared to the actual solution the white king is too far off.

EG 117

No 9932, **S.Zakharov**. There is a dual: 2.Bxg2 e2 3.Bb2 f1Q+ 4.Bxf1 exf1Q+ 5.Kg5 Se5 6.Bxe5 draws, e.g. 6.... Qg2+ (6.... Qc1+ 7.Bf4) 7.Kf6 Qf3+ 8.Kg5 Qe3+ 9.Bf4 Qe8 10.Kh6 Qf8+ (else Kg7) 11.Kg6, threatening Bg5 or Bh6.

No 9934, **L.Veretennikov**. No solution. After 8.... cxb3 9.Qa5+ Kbl 10.Qe1+ Ka2 11.Qe2+ b2 12.Qxh2 black draws by 12.... c5 13.Kg4 c4 (but not 13.... Ka1 14.Qh8 d4 15.Qa8+ Kbl 16.Qa6 Kc2 17.Qc4+ Kd2 18.Qb5 and wins), and now:

- 14.Kf3 Ka1 15.Qe5 Ka2 16.Qh2 Ka1 17.Qh8 Ka2 18.Qa8+ Kb3 19.Qb7+ Kc2 20.Qh7+ Kc1 21.Qh1+ Kc2 22.Qg2+ Kc1 23.Qf1+ Kc2 24.Qe2+ Kc1 25.Ke3 d4+ draw.
- 14.Qc2 Ka1 15.Qa4+ Kbl 16.Kf3 Kc1 17.Qa3 Kc2 18.Qa2 Kc1 19.Ke2 c3 20.Qa3 c2 21.Ke3 Kbl 22.Qd3 Ka1 draw.

No 9940, **G.Amirjan**. The award says that this study has significance for endgame theory, but Cheron and Nunn already describe the winning process in detail. The final underpromotion is not even strictly necessary, as there is a different, though long-winded, way to win this ending: 8.Kf6 Rf2+ 9.Ke7 Re2+ 10.Kf8 Ra2 11.Rg7+ Kh8 12.Rg6 (creating a loop-hole for the king on h6) Ra8+ (12.... Kh7 13.Rf6 Re2 14.Rf1) 13.Ke7 Ra7+ 14.Kf6 Ra6+ 15.Kf5 Ra5+16.Kg4 Ra8 17.Kg5 Kh7 18.Ra6 Rb8 19.Kf6 followed by Ra6-e6-e8.

Moreover, the 3rd move of black is bad. Every sensible defence against white's only threat (4.Rb8+ and 5.f6) draws: 3.... Rd8 and white cannot make progress, 3.... Rf2 4.Kf6 Kg8 5.Rb8+ Kh7 with a standard draw (6.Ke6 Kg7, 6.Rf8 Ra1), 3.... Re2+ 4.Kf6 Kg8 5.Rb8+ Kh7 6.Kf7 Ra2 7.Rb7 Ra6 8.f6 Ra8 (database-checked).

Almost all the lines above can be found in Nunn's book 'Secrets of Rook Endings'.

No 9944, **V.Kozhakin, V.Kovalenko**. No win after 1.... Bf4 (please note that bPh5 should be on g5). Black intends to move his bishop up and down the diagonal b8-f4 and wait. As soon as the queen moves black plays ... g1Q; Qxg1 g2 with an easy draw. The only try for white is 2.Ke7 Bb8 3.Kf6 Bf4 4.Kf5 Bd2 5.Qd1 g1Q 6.Qxg1 g2 7.Qd1, but this does not pose many problems: 7.... Kh2 (7.... Bf4 also draws) 8.Qxd2 Kg3 and white cannot win, e.g. 9.Qe1+ Kh2 10.Qe2 Kh1 11.Qe4 Kh2 12.Qe5+ Kh3 13.Qh8+ Kg3 14.Qd4 Kh2 15.Qb2 Kg3 16.Qa1 Kf2.

No 9945, **A.Grin**. No win: 2... Sg3+ 3.Kg6 Kb2.

No 9955, **V.Kos**. I cannot find a draw for black after 2.Sxg5 Kxg5 3.Sh3+ Kh5 (3.... Kf6 4.Rg4, 3.... Kf5 4.g4+ Kf6 5.Sg1) 4.g3, e.g. 4.... Rg2

5.Rh4+ Kg6 6.Rg4+ Kh5 7.Rg8 d5 8.Kc5 d4 9.Kc4 and white wins.

No 9971, V.Gorbunov. As white I would be confident to draw the position after 7.Rh6+ Kxh6 8.h8Q+ Rh7 9.Sf5+ Rxf5 10.Qd4 (winning the e-pawn). Unfortunately it is impossible to support this opinion with exhaustive analysis, and theory has scarcely investigated the GBR class 1600.01 so far.

No 10001, A.Koranyi. There is a dual draw: 1.Be6 Kg2 (1.... Re5+ 2.Kf2 is even dangerous for black) 2.Ra2+ Kg1 3.Ra4 Re5+ 4.Kd1 (to keep the 2nd rank open) g3 5.Bh3 Rh5 6.Ra2 draw.

No 10004, J.Roche. No solution: Guy Bacqué points out 5.... Re1+ 6.Kg2 (6.Kf2 Rxb1 7.Rd7 Bc3) Re7 7.Sd2 (7.Rd1 Kc2 8.Rh1 Bb2) Kc2 8.Rd8 Re2+ and black wins.

No 10005, J.Murarasu. Mr Campioli even found a win(!) for white: 1.Kg8 (threatening 2.g5+ fxe5 3.f5 and the f-pawn promotes with check) g5 2.f5 a5 3.e5 wins.

No 10007, J.Rusinek. No solution (please note that bBh3 should be on h6). 6.... Kxd2 (threatening... Bd3+ followed by ... Bg7) wins for black: 7.Rc2+ (7.e5 Rxa1+, or 7.Rg3 Bd3+ 8.Kb2 Rb4+ 9.Ka3 Rb8+ 10.Ka4 Ra8+) Ke3 8.Rg2 Bd3+ 9.Kb2 Bc5 10.Rg3+ Ke2 11.Rg2+ Kf3 12.Rd2 Ke3.

No 10013, G.Amirjan, D.J.Brink, J.van Reek. The authors of the correction have omitted the wPa4 from Amirjan's original and thereby introduced a dual (please note that wKf4 should be on g4): 2.Rxb2+ followed by Bxa2 and Rxc2 draws. With wPa4 this doesn't work: 2.Rxb2+ Bxb2 3.Bxa2+ Kxa2 4.Rxc2 Kb1 and black wins. Irrespective of the wPa4 there is another dual in both versions: 2.Rxb2+ Bxb2 3.Rxc2 (3.Bf5 a1Q 4.Rxc2 transposes, but better is 3.... Bc3) a1Q 4.Bf5 (or 4.Rh2 a2 5.Bf5+ Kc1 6.Rh1+ Kd2 7.Rxa1 Bxa1 8.Be6 draw) Ka2 5.Be6+ Kb1 6.Bf5 Qa2 7.Re2+ Kc1 8.Be6 Qxe6 9.Rxe6 a2 (9.... Kd2 10.Rh6) 10.Re1+ Kc2 11.Rh1 Bc1 12.Rh2+ Bd2 13.Rh1 draw.

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We continue *EG's* intermittent series of translations from important twentieth century Russian sources hitherto inaccessible in English.

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The extensive introductory material to Troitzky's "Sbornik shakhmatnykh etyudov" (Leningrad, 1934) was almost entirely omitted from the English "360" (Leeds, 1937) edition. The three items - two by Troitzky, the third a long essay by Herbstman - are important to us today for two reasons. First, they supply details indispensable to

the proper evaluation of Troitzky's life, labours and legacy; second, they illustrate the high level of discussion of chess aesthetics that was expected over 60 years ago. There is a case for maintaining that standards have plunged in the interim and that the time is ripe for revival, re-education and reassessment.

There is one overriding caveat: the year is 1934, the place is the USSR, and what follows is a complete (though not always a word-for-word) translation (by AJR). Ideological (Marxist-Leninist) genuflexions, *de rigueur* right up until glasnost (1985), have not been excised from the original: they are left to the reader to identify, and either to interpret (on his own responsibility reading between the lines), - or to ignore. *They ought not to influence evaluation of the bulk of the material, which we consider to be of high quality.* The tone, manner, thoroughness, even the vocabulary, especially of Herbstman's essay, may open the eyes (or raise the eyebrows) of a Western reader for whom the knowledgeable discussion of the aesthetics of endgame studies is new territory. Criticism of the essay might focus on exaggeration, bias in the selection, and the easy wisdom of hindsight, but such criticism can be only a matter of degree.

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This is a translation of Herbstman's preface on pages 13 to 34 of Volume 1 of Troitzky's selection of 750 selection of his studies. The first volume appeared in Leningrad in 1934, but the second was never published. Translation of Troitzky's own introduction, the complete text of his 'Not an autobiography', and all of the referenced chess positions, will be in *EG's* next issue.

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A.A.Troitzky - founder of the contemporary chess study

1. While this edition of Aleksei Alekseevich Troitzky's chess studies will enable the broad chess public of the USSR to become acquainted with the 40 years' of creative activity by the world's most prestigious composer, the event is significant also for the whole world of chess composition.

It was Troitzky who not only brought to light but elaborated the overwhelming majority of the study concepts and ideas that the composers of today work with.

It was Troitzky whose flood of beautiful work closed the gap between the study and the problem, and at the level of ideas established the link between the study and the practical game.

It was Troitzky who fashioned a theory of the

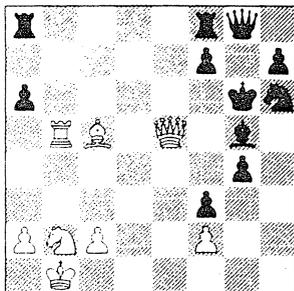
chess study that is self-consistent and complete. Chess composition, which hitherto had been no more than a plaything or amusement, was raised by the power of Troitzky's talent to the level of genuine art. For this achievement the Soviet state has awarded him the title of Honoured Art Worker.

To analyse Troitzky's achievement in detail so as to lay bare its conceptual and technical form and content requires an investigation in depth. In this essay I attempt to delineate, if only in its basic attributes, the broadest features of our composer's creative achievement, to comment on his intellectual primacy and decisive priority in every area of study composition, and to characterise his approach to creativity.

Let us start by considering the salient features of study composing that prevailed prior to Troitzky's advent.

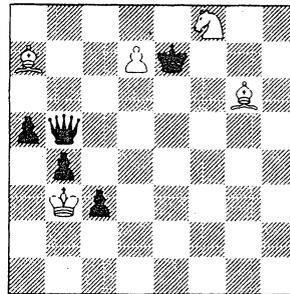
The majority of so-called "studies" were investigative or analytical, applied to an ordinary ending, or else they consisted of middle-game combinations lacking in subtlety. The output of Philidor, Stamma and Mendheim was of this kind, and to a great extent also the work of Horwitz and Kling, Berger, Jespersen, Behting and others. In only a few of these early studies can we discern chess beauty in the foreground, specific beauty built on the unexpected effect of a sacrifice, of a manoeuvre, of the movement and disposition of the pieces, of a climactic configuration, and suchlike. But this limited chess beauty was enough to satisfy the barely developed aesthetic taste of the time, appropriate to its epoch in history - and determined by it. Three examples illustrate our assertion. The first is taken from the first prize set (so, 'beauty' recognised and honoured!) consisting of six studies by B.Horwitz entered for the international composing tourney organised in conjunction with the London tournament of 1862 on the occasion of the Great Exhibition of industry. The second and third are from Chigorin's magazine "Shakhmaty" in the year 1894.

H1: B.Horwitz, 1862



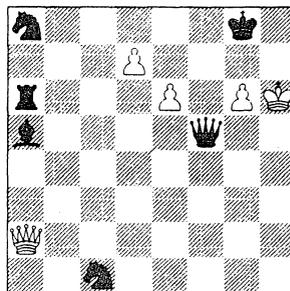
b1g6 4744.35 Win
 1.Qxg5+ Kxg5 2.Be7+ Kf4 3.Bd6+ Ke4 4.Re5+ Kd4 5.c3+ Kxc3 6.Re4 Rb8 7.Be5+ Kd2 8.Bf4+ Kc3 9.Rc4 mate.

H2: K.Behting, 1894



b3e7 3021.13 Win
 1.Bc5+, with:
 Kd8! 2.Se6+ Kxd7 3.Be8+ Kxe8 4.Sc7+ wins, or
 Qxc5 2.d8Q+ Kxd8 3.Se6+ wins.

H3: F.Amelung, 1894



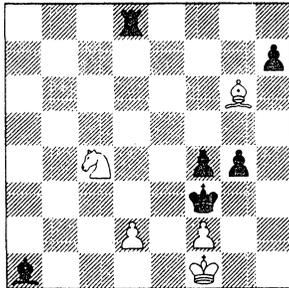
h6g8 4336.30 Draw
 1.e7+ Sxa2 2.d8Q+ Bxd8 3.exd8Q+ Qf8+ 4.Qxf8+ Kxf8 5.Kh7 Ra7+ 6.Kh8, 7.g7+ Rxg7 stalemate.

H1 shows: a white queen sacrifice by a capture on the first move, a series of checks, and a single quiet move by the rook to threaten two mates, whereupon Black saves himself from the instant fatality of one threat only to fall victim to the other, itself hardly remote; construction that is cumbersome and unnatural; spectator black pieces. In the Troitzky era, in our era, such a study would scarcely be deemed worthy of publication, let alone honour. The other two studies betray similar coarseness and forcing play. This was no accident, but a consequence of the state of study development at the time: clumsiness of starting, and indeed final, positions, a single line of play,

compulsion of move without choice by either side, the complete absence of black counter-play, a mechanical solution, and finally, feebleness, lack of colour, and naivety in the motivations - in short, poverty of thought. It must be conceded that this period played its role in history by studying the endgame, feeling the contours of study aesthetics, and groping for ideas. There were chance discoveries that shone forth by virtue of thought or expression, but these can be counted in singles, as exceptions to the general rule.

Troitzky, whose first study appeared in 1895 (his first problem was published two years earlier), produced a veritable revolution in study composition when his brilliant output and his pronouncements on theory redefined the scope and significance of the study to create its present-day terminology. Each new Troitzky study introduced a deeply considered approach to the questions surrounding chess composition and opened up new horizons.

Troitzky describes his first steps in composing in these words: "The publications that came my way - Russian newspapers, but also the German treatises by Dufresne and Berger - failed to show me (or perhaps I failed to notice) artistic studies, so that I had nothing and no one to work on as a model. All my output was so-to-speak from scratch. To begin with I even lacked the basic form of the study, having started by converting problems into studies. I thought it was possible to compose positions from a game (that is, entirely true to life) in the guise of problems, and that is how I in fact started. My first effort of all was naive in the extreme:



f1f3 0341.23

Win
It is a win (mate in 2) by 1.d4. I put together five more such positions, after which I had done with problems and effectively rejected them, plunging straight into the realm of studies."

Originality and beauty of idea, stirring in the solver the most subtle aesthetic experience, an experience of beauty whose manifestation, evoked

by the outward particular features of board and men, itself undergoes scarcely any modification, even when the content ascends to a new and loftier rung; naturalness and vibrancy of starting position: for a study must resemble an episode from a game, be it endgame or middle-game, and must resemble it not just externally but internally, not just in its structure but in its content, and, most vital of all, it must reflect the game's principles and most prominent features; next, lightness of construction and play must match economy of form and solution: passive on-lookers are anathema, for there is no place for even a single piece that does not participate in the struggle; then, the pieces that play a role in the finale, in the climactic position, must be organically woven into it: a study cannot tolerate idle hands, for the more work that is done by this or that piece the greater the dynamism, indeed the value, of the whole; a Troitzky era study will strive for inner tension, for the surprise effect of a manoeuvre or sacrifice; its solution must be unique, ruling out parallel paths that would also satisfy the stipulation, while at the same time being enriched by a plurality of variations, and by deceptive divarication in the solution, in other words by thematic tries, by active counter-play, equally distributed between the contending sides in achieving the stipulated win or draw, both sides being confronted with major obstacles; a study should be shot through with double-edged struggle, it should be packed with action that stirs and captivates.

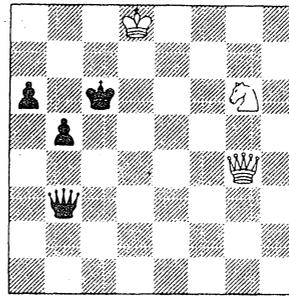
Only a Troitzky could impart the foregoing - and all of it he and he alone has accomplished, both in deed and in word.

2.

However one approaches it, a Troitzky study charms by the lightness and naturalness of its solution and structural touch; the aesthetic effect, founded on play rich in ideas, is generally prefaced by a subtle introduction interesting in its own right, full of sparkling strategic and tactical incident; gone are the long solutions of the old masters - instead we meet large-scale studies with branching variations, everywhere with lively play; a quiet move adds the richness of deep motivation and a well disguised threat; the phases of the struggle persuasively interlace. The very act of putting Troitzky's studies under the microscope teaches us to regard the study as more than a ruptured sequence of moves; instead, it becomes a unified, assembled product. Each study glitters with the depth and novelty of its conception: it entralls, it excites, it captures the imagination, and it stimulates our own creativity.

Circumstances decreed that the chess world knew of many of Troitzky's compositions only after the themes and ideas they revealed had been realised by other composers. [Herbstman has in mind the relative obscurity of the St Petersburg chess columns of 1895-99 and Troitzky's enforced abandoning of, and separation from, chess until 1905, rather than the subsequent disruption of WW-I, the 1917 Revolution, and their prolonged aftermath. To make sense of the publication of Troitzky studies in the years 1897-1899 we may reasonably assume that the composer either had already submitted, or continued to submit, his already composed studies (to Chigorin, presumably) for publication. Tr.] It is asserted that H.Rinck and the Platov brothers developed battles between the pieces [Herbstman's words are clear, his intended meaning is not. Rinck specialised in pawnless play but only two such early Platov studies are in Whitworth's 1994 book. *H6* and *H7* may indicate his meaning. Tr.], that domination is the imprescriptible due of Rinck, that Simkhovich discovered the positional draw, and Herbstman incarceration. In point of fact all these themes and more were discovered and realised by Troitzky: the above-mentioned composers either deepened them or systematised them. The chronological priority of Troitzky with respect to a group of themes was established by Vasily Platov in his article on Troitzky which appeared in *Zadachy i Etyudy* No.1 (1927); and the reader is at liberty to pursue for himself this research angle by comparing the studies of the present collection [of Troitzky's studies] with the anthologies of other composers. The point we make here is not that this or that study by Troitzky was published earlier than the analogous study by another composer - this is easily checked by comparing publication dates - but that the *priority of idea* in practically every region of study creativity belongs to Troitzky. Whether we take the struggle of pieces, domination, systematic ideas, checkmate, stalemate, underpromotion, problem themes, positional draw, incarceration, pinning, or synthesis of ideas - we find all of these, underlined by a pervasive breadth of scope, realised in Troitzky's multi-faceted work. The struggle of assorted force of approximately equal value (as a rule the side that achieves the stipulation is materially somewhat weaker, albeit there is the familiar positional compensation in having the first move) is convincingly and comprehensively illustrated in the next five studies.

H4: Bohemia, 1910

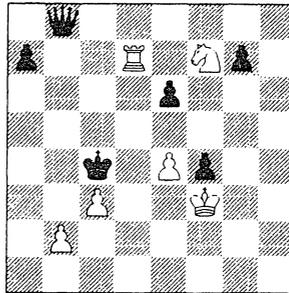


d8c6 4001.02

Win

1.Se5+ Kd6! 2.Sd3! Qf7 3.Qd4+ Qd5 4.Qf6+ Qe6 5.Qg7! Qf5! 6.Sf4! Kc5 7.Qc3+ K- 8.Qc7 mate.

H5: Deutsche Schachzeitung, 1911

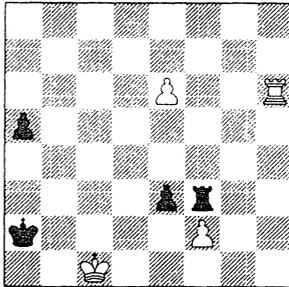


f3c4 3101.34

Win

1.Rb7! Qg8! 2.Se5+ Kc5 3.Rb8! Qh7 4.b4+ Kd6 5.Rh8 Qxh8 6.Sf7+ wins.

H6: Deutsche Schachzeitung, 1910.

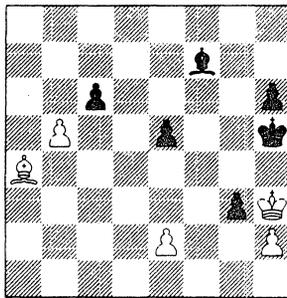


c1a2 0400.22

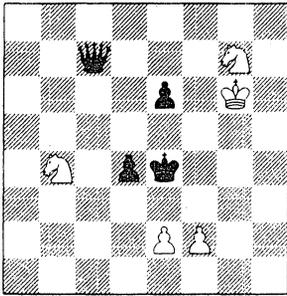
Win

1.e7 exf2 2.Rh2 Re3 3.Rxf2+ Ka1! 4.Rf3! Re1+ 5.Kc2 Re2+ 6.Kb3 Rb2+ 7.Kc3 Re2 8.Rf1+ Ka2 9.Rf2 wins.

H7: *Deutsche Schachzeitung*, 1909.



h3h5 0040.34 Win
 1.b6 g2! 2.Kxg2 Bd5+ 3.e4! Bxe4+ 4.Kg3 c5
 5.h4 Kg6 6.Bc2 wins.
 H8: *Trudovaya pravda*, 1925.

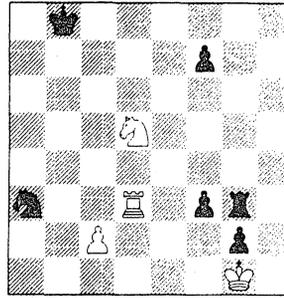


g6e4 3002.22 Win
 1.Se8! Qh2 (or any) 2.Sf6+ Ke5 3.Sg4+ (or Sd7+,
 Sd3+, Sc6+, as necessary).

H4 is a miniature showing a tense struggle with queens. Quiet white queen moves, repeated sacrifice of the white knight, mating threats - at first on the file, then on the diagonal - all is out of the ordinary for material balance of this kind! H5 shows a threefold rook sacrifice abetted by three knight forks. Unique intermediate moves force Black's king onto a vulnerable square where the knight takes profit. H6 and H7 are lively piece struggles, in the first case with rooks and pawns, in the second with bishops and pawns. H8 handles two knights against the queen: White wins the opposing queen after offering her no fewer than 23 (!) squares to choose from. Troitzky shows in this study, and in earlier studies, the domination theme that Rinck showed with less conviction - cf. H9 [Only the year is given by Herbstman, not other source details, which weakens his case. Tr.] and H10 [But Rinck shows in H10 the full 14-square domination as against Troitzky's 13, the latter requiring one more chessman and a shorter solution. Tr.]. Yet

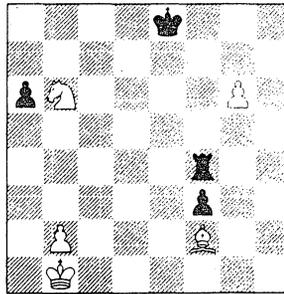
Rinck's study was published 15 years later! Troitzky applied himself generously to so-called systematic ideas. Katzenellenbogen covered this aspect of Troitzky's work in his article in *Zadachy i etyudy* No.8, therefore I shall quote just two examples, H11 and H12.

H9: 1896.



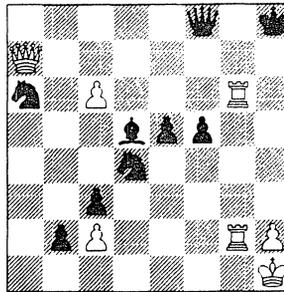
g1b8 0404.13 Draw
 1.Rb3+! Kc8 2.Rxf3 Rxf3 3.Kxg2 draws.

H10: H.Rinck, *Sydsvenska Dagbladet Snällposten*, 1911



b1e8 0311.22 Win
 1.Sd5 Rc4 2.g7 Kf7 3.g8Q+ Kxg8 4.b3 wins.

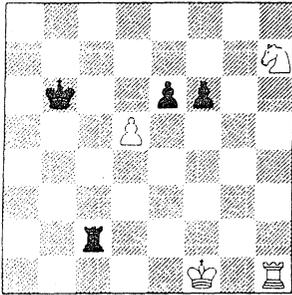
H11: *Deutsche Schachzeitung*, 1908.



h1h8 4236.34 Win
 1.Rh6+ Qxh6 2-8.Qa8-b7-c8-d7-e8-e7xe5+
 9-16.Qe7-e8-d7-c8-b7-a8-a7xd4+

1 7 - 2 1 . Q a 7 - a 8 - b 7 - c 8 : f 5 +
 22-28 Qc8-b7-a8-a7-d4-d3xc3+ 29-34.Qxb2+
 35-38.Qxd5 wins.

H12: Bohemia, 1912.



f1b6 0401.12

Win

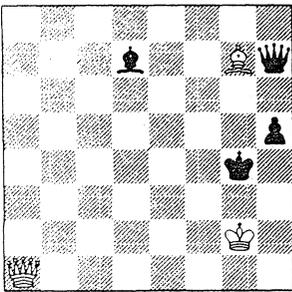
1.dxe6 Rc1+ 2.Kf2 Rxh1 3.e7 Rh2+ 4.Kf3 Rh3+
 5.Kf4 Rh4+ 6.Kf5 Rh5+ 7.Kxf6 Rh6+ 8.Kf5
 Rh5+ 9.Kf4 Rh4+ 10.Kf3 Rh3+ 11.Ke2 Rh2+
 12.Kd3 Rh3+ 13.Kd4 Rh4+ 14.Kd5 Rh5+ 15.Kd6
 Rh6+ 16.Sf6!! Rxf6+ 17.Kd5 Rf5+ 18.Kd4 Rf4+
 19.Ke3 Rf1 20.Ke2 wins.

In H11 after a series of checks White can capture the black pawn on e5, after which the queen returns by the same path to a7, all of which merely removes Black's defence of his knight on d4. Then the queen undertakes a whole system of movements to mop up the black pawns on f5, c3, b2, and on move 38 to deprive Black of his last chance, the bishop on d5. In H12 the white king ascends or descends the board four times on parallel files.

Troitzky brilliantly illuminates the theme of checkmate. What could be more paradoxical or economical than checkmate with a minor piece, in violation of chess theory guidelines? H13 and H14 show us mate with a lone bishop and a lone knight, and in this book the reader will even find an anticipation of L.Kubbel's brilliant sacrifices of the queen - leading to mate with a lone bishop or knight.

[The positions are No.96 and:

Chess Amateur, 1916. No.35 in '360'.

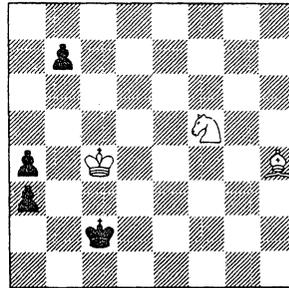


g2g4 4040.01

Win.]

Chess theory is a set of conventions. Its specific application to the game and to composition stems from these conventions. Of course objective truth has a conventional character for chess composition, since it consists of the reflection of principles and idea-rich moments peculiar to practical play, which is by its very nature conventional. The most conventional of all conventions is - stalemate, whose essence is a draw in the presence of overwhelming superiority of the opponent! Stalemate is a rare occurrence over-the-board. Perhaps this is why stalemates are relatively rare in Troitzky's oeuvre. But even here he has something to teach the composers of today. H3 illustrates the type of stalemate study prevalent before Troitzky. His very first studies draw a sharp boundary line with the productions of his predecessors. In H15 and H16 (this one by the German composer P.Heuäcker) the stalemate arises from promotion of a black pawn propelled forward by pressure from the white king. H16 was published 32 years after H15. When we compare them, Troitzky's shows three stalemate positions and Black has a choice of defences, while Heuäcker's is shorter and the solution has a more forcing character with only one variation, so no more than a pallid allusion to the superb play that unfolds in H15. Another example of our comparative technique contrasts H17 with H18 by the German composer G.Bernhardt, separated from each other by 26 years. H18 seems blunted and anaemic, lacking in the interesting introductory play with lively activity by the black knight that we find in H17. We could adduce further examples, but to do so would not further the purpose of the present essay.

H13: 1897

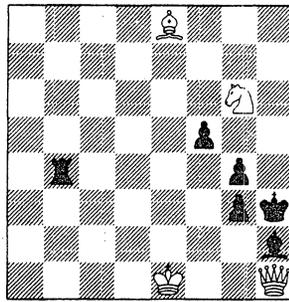


c4c2 0011.03

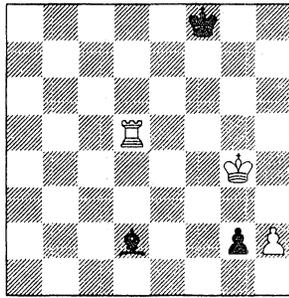
Win

1.Sd4+ Kb1 2.Sb5 a2 3.Sa3+ Kb2 4.Bf6+ Kxa3
 5.Ba1! b5+ 6.Kc3 b4+ 7.Kc4 b3 8.Kc3 b2 9.Bxb2
 mate.

H14: 1897

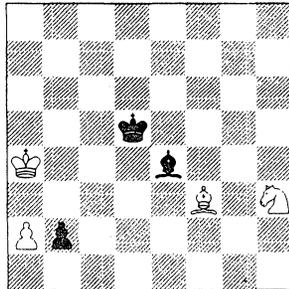


e1h3 1341.03
 1.Bc6! Rb1+ 2.Ke2 Rxb1 3.Bg2+!! Kxg2 4.Sf4+ Kg1 5.Ke1 g2 6.Se2 mate.
 H15: 1895



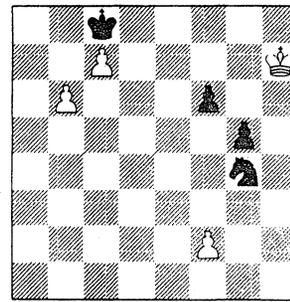
g4f8 0130.11
 1.Rf5+ Ke7 2.Re5+ Kf6 3.Re1! Bxe1 4.Kh3, and g1Q stalemate, or g1S 5.Kg2 Se2 6.Kf1 draw. If 1...Kg7 2.Kh3! g1Q 3.Rg5+ Qxg5 (Bxg5;) stalemate.

H16: P.Heuäcker, 1927



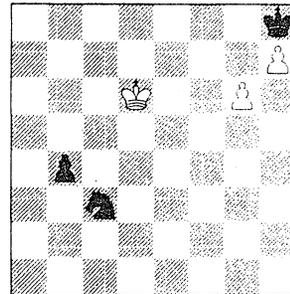
a4d5 0041.11
 1.Sf2 Bxf3 2.Sd1 Bxd1+ 3.Ka3 g1Q (g1R;) stalemate.

H17: 1896



h7c8 0003.32
 1.f3! Se5 2.Kg7 Sxf3 3.Kxf6 g4 4.Kf5 g3 5.Kg4 g2 6.Kh3 g1Q(g1R) 7.b7+ Kx- 8.b8Q+ Kxb8 stalemate.

H18: G.Bernhardt, 1922

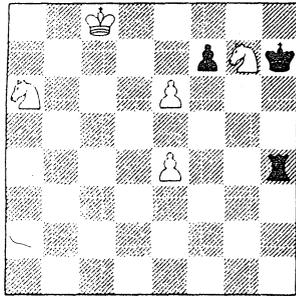


d6h8 0003.21
 1.Kc5 b3 2.Kb4 b2 3.Ka3 b1Q(b1R) 4.g7+ Kx- and stalemate.

The themes so far examined are those that I would provisionally call classic, qualitatively set against themes that we may call romantic. In my article "The evolution of the study" ("64", No.19 of 1928) I made the observation that with classicism in the study it is the material that largely determines the idea, serving as an end in itself, with the alignment of material in balance, while in the romantic sub-genre it is the idea that determines the choice of material, the alignment in the latter lacking stability. The idea with the classic is canonical, with the romantic it is unfettered. I have since laid stress on the tendency in both classicism and romanticism to develop having regard to realism, by which is to be understood the reflection and expression in artistic form of the principles and prominent creative incidents of the game as played over-the-board. It should be pointed out that these qualitatively distinct styles of creativity in the study are solidly represented in the work of Troitzky.

Themes that stand on the border between the classic and romantic, now and then breaching the code of stability of force that characterises the classical tradition, are: promotion, the passive sacrifice, and refusal of material. The embodiment of these themes is yet again outstanding in the case of Troitzky.

H19: 500 Endspielstudien, 1924

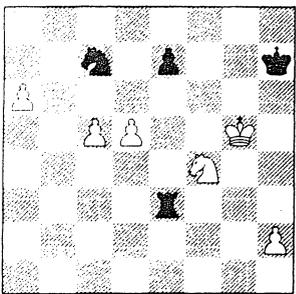


g8h7 0302.21

Win

1.Sf5 Rxe4 2.exf7, and Re7! 3.f8R!, or Re6! 3.f8S+, winning.

H20: 28 Rijen, 1925



g5h7 0304.41

Win

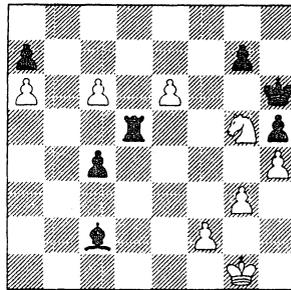
1.d6, and Sxa6 2.d7 Rg3+ 3.hxg3 Sxc5 4.d8S!, or exd6 2.cxd6 Sxa6 3.d7 Rg3+ 4.hxg3 Sc5 5.d8B wins.

H19 and H20 will speak to us about this with the unrivalled eloquence of chess poetry. Let us pause for a moment on H20. What is the motivation of the promotion to knight? It is that after 4...Se4+ 5.Kh4 Sxg3 6.Kxg3, White remains with two knights and Black with a pawn. (We shall have occasion later to deal with this research field of our composer.) Promotion of the self-same white pawn to bishop is ruled out by that self-same black pawn: Black would play 4...e5, and after the white knight has moved, Se6+ would follow, drawing. When Black in the second variation liquidates his pawn, so as to forestall White win-

ning an endgame with his two knights, he simultaneously gives up his prospective attack on the white knight on f4, and then White is able to promote to bishop after all, since he is left with two minor pieces and a pawn against a minor piece. H20 is a stroke of genius in its depth and succinctness and lightness of implementation!

We can now turn to Troitzky's work with problem themes. Here too Troitzky's pre-eminence is plain. In articles placed in *Magyar Sakkvilág* in 1929, and in the review *Zadachy i etudy* No.7 I did no more than systematise and supplement what Troitzky himself had done years before. The most subtle of problem manoeuvres such as the 'roman' decoy, Turton doubling, the pericritical Herlin-Loyd movement [Paul Valois: I do not think that Loyd links with the Herlin manoeuvre], cutting-point (German: Schnittpunkt), focal point (German: Brennpunkt) and repeated square revisiting - all of these feature with the utmost clarity in Troitzky's work. From the large number of studies with problem themes I have chosen four. H21 and H22 show the cutting-point theme and sacrifice on the point of intersection of two differently moving black pieces. In H21 we see for the first time in a study two cutting-points (which both A.Gulaev and myself achieved only 20 years later), and in 1934 in *Shakhmaty v SSSR* there appeared a study with a triple cutting-point. H22 is a surprising example of the cutting-point employing not two white pawns, which is customary, but one, putting the specific characteristics of the pawn to good use, namely movement on the file and capture on the diagonal.

H21: Bohemia, 1908.

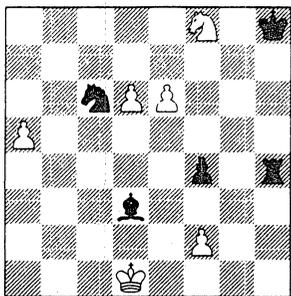


g1h6 0331.64

Win

1.Sf7+, and Kh7 2.e7 Rd1+ 3.Kh2 Re1 4.Sg5+ Kg6 5.c7 Bf5 6.Se6, or Kg6 2.c7 Rc5 3.Se5+ Kf5 4.e7 Ba4 5.Sc6 wins.

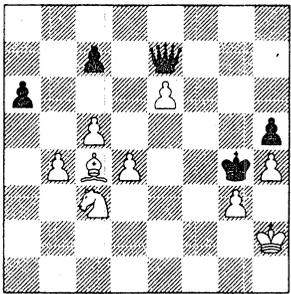
H22: *Shakhmatny listok*, 1926.



d1h8 0334.41

Win
1.d7 f3! 2.d8Q Sxd8 3.e7 Rd4 4.Kc1 Bb5 5.Sd7 wins.

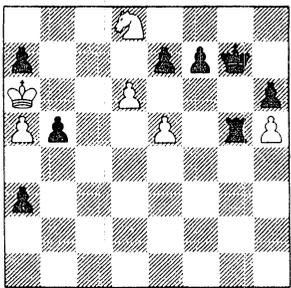
H23: *Pravda*, 1928.



h2g4 3011.63

Win
1.Be2+ Kf5 2.Sd5 Qxe6 3.Bd3+ Kg4 4.Be4! Qh6!
5.Sf4! Qf6(Qg7/Qh8;) 6.Sd3 Qxd4 7.c6
(zugzwang) a5! 8.b5! a4 9.b6 Qxb6 10.Se5 mate.

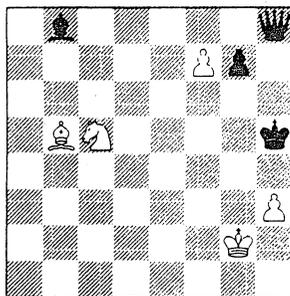
H24: *Shakhmatny listok*, 1928.



a6g7 0301.46

Draw
1.Se6+ fxe6 2.d7 a2 3.d8Q a1Q 4.Qxe7+ Kh8
5.Qf8+ Kh7 6.Qf7+ Rg7 7.Qf1 Qxf1 stalemate, or
Qa2(Qb2) 8.Qb1+! Qxb1 stalemate, or
Qa3(Qc3/Qd4;) 8.Qd3+ Qxd3 stalemate, or Qxe5
8.Qf5+ and stalemate.

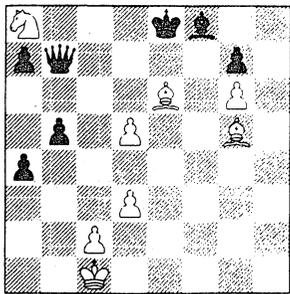
H25: 1895



g2h5 3041.21

Draw
1.Sd7 Bd6 2.f8Q Bxf8 3.Se5 Qg8 4.Bc4 Qh7
5.Bd3 Qh6 6.Be2+ Kh4 7.Sf3+ draws.

H26: F.Simkhovich, 1927



c1e8 3051.44

Draw
1.Bf7+ Kd7 2.Be6+ Kd6 3.Bf4+ Kc5 4.Be3+ Kb4
5.Bd2+ Ka3 6.Kb1! Qxa8 7.Ka1, positional draw,
for any move of bQ or bB leads to perpetual
check, while White always has the waiting king
moves Kb1-a1-b1 at his disposal.

H23 illustrates the focal point idea, combining it with zugzwang. L.Kubbel sums up H24: "The problem theme of focal points is transferred in a masterly manner into a stalemate study and shown in three variations."

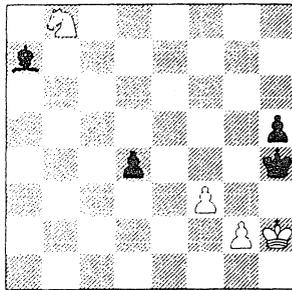
F.Simkhovich systematised and sharpened the creative attention of composers with the idea of the positional draw, a highly romantic idea. That is his due, beyond any doubt. But for the filigree positional draw, multifaceted and comprehensive, earlier than any other, we must look again to Troitzky. The isolated king, the cornered queen, cyclic attack, varied forms of perpetual check, all of these are manifest in a series of brilliant Troitzky compositions created at the very start of his activity and continuing up to the present time. Let us compare the locking-in of the black queen, or if the latter slips out, of the black king, the theme of Troitzky's H25, with Simkhovich's H26.

showing precisely the same theme.

Let our composer speak for himself: "After 3.Se5 the black queen is restricted to two squares only, g8 and h7, if she tries for freedom via h6 then this restricts the black king to two squares, g6 and h5. If White mistakenly meets the move Qg8 (or Qh7) with Be2+, instead of Bc4 (or Bd3), then Black wins, because the black king slips out via h6 or g5. Here we see the germ of the idea shown by Simkhovich in his study honoured in *Pravda*. This study is very much to my liking - I think it is simply superb. Material, position, play, idea - they all impress. ... Simkhovich has succeeded in cultivating a luxuriant fruit from a seedling (my position) that maybe he was not fully aware of. The square e8, which in his study could give the black queen her escape hatch, were it not blocked, corresponds to the square h6 in my study. A specific queen move in both studies (Qe8 or Qh6) is the most interesting move, determining the perpetual check to the black king. The white king manoeuvre Kb1-a1-b1-a1 in his study corresponds to the bishop moves Bc4-d3-c4-d3 in mine, though their nature differs somewhat, and H26 is more subtle. It is interesting to note that the material is in each case practically the same: Simkhovich skilfully added a knight as a sacrificial decoy of the black queen to an unfavourable square, after which two minor pieces oppose the queen, as in my study. Of course, we should not descend to counting pawns - they reflect the depth of the conception."

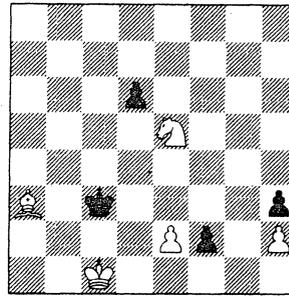
This deconstruction of a study shows that Troitzky is not only a study poet of the highest order, a real creator of studies, but also a profound theoretician.

H27: *Tidskrift för Schack*, 1910.



h2h4 0031.22 Draw
1.Sc6 d3 2.Sxa7 d2 3.Sb5 d1Q 4.Sc3 Qd6+ 5.Kh1 and 6.Se4. draw.

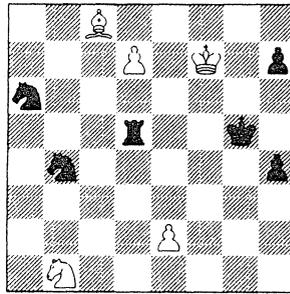
H28: *Zadachy i etyudy*, 1928



c1c3 0011.23 Draw
1.Bb4+ Kb3! 2.Sf3 f1Q+ 3.Be1 Qg2 4.Bg3, drawn.

[David Blundell: Probably unsound - bQ is freed by dP's advance. In No.309 in '1234' bPd6 is omitted and bPf3 added. The solution is the same apart from 2.Sxf3.]

H29: *L'Échiquier*, 1927.



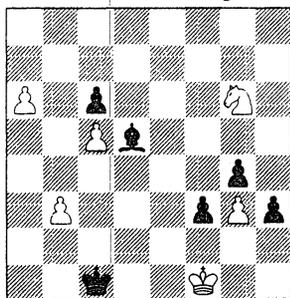
f7g5 0317.22 Draw
1.Sc3 Rd4 2.e3 Rd3! 3.Se4+ Kh6! 4.Sf2, and Rd2(Rd6) 5.Se4! Rd5 6.Sf6 Rd3 7.Sg4+ Kg5 8.Sf2 Rd5 9.Se4+ Kh6 10.Sf6, or Rd5 5.Sg4+ Kg5 6.Sf6 Rd3(Rd1) 7.Se4+ drawn.

Our next three examples are positional draws. In H27, thanks to his use of tempo-gaining moves, White succeeds in locking the black king in and thereby reducing the black queen's power to nil. H28 is one of Troitzky's more recent pieces. It spurred the tourney judge to a burst of lyricism on the occasion of placing it highly: "This study shows the positional draw theme. The construction is light and refined. One senses the master's fist. This is after we are convinced that the black queen really is in hock - we don't want to believe it, there is so much space on the board. There has to be a way out, but, my goodness, there is not." H29 is a perpetual motion study, a movement that goes on for ever, an attack that never stops. The idea is geometrical, with the knight marking out

an elongated rhombus, periodically revisiting the same square. With a combined attack on black rook and king the knight in one variation describes the rhombus from right to left, in another from left to right, and it could even be now to the right, now to the left, in which case the periodicity is 4, 6, 8 or 10 moves, depending on how Black plays. The checks to the black king serve as jumping-off platforms for the tireless harrying of the black rook.

Sub-dividing the incarceration theme for the use of the school of young soviet composers as a creative exercise, was my doing. But the honour of elaborating this highly interesting idea that is excellently suited to accompany other study ideas (such as pinning, and lengthy king journeys) fell to Troitzky and to him alone. The incarceration of a bishop, incarceration of a bishop by underpromotion, incarceration in conjunction with black counterplay based on a pin, all of these can be found chez Troitzky long before the positions by myself, by Gurvich, by Korolkov and many another composer. Two illustrations only must suffice, though dozens are on tap. In every case we find something new, unexpected and valuable in both the aesthetic and practical senses. Two further studies show the same theme, namely the blocking in of a knight on a corner square.

H30: *Deutsche Schachzeitung*, 1912.

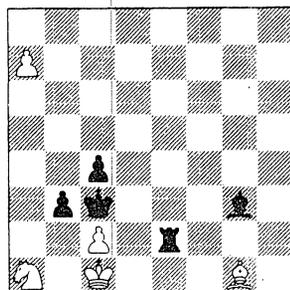


f1c1 0031.44

Draw

1.Se5 h2 2.Sd3+ Kd2! 3.Sf2 Bxb3 4.Sh1! Bc4+ 5.Kf2 Bxa6 stalemate.

H31: A.O.Herbstman, 1928



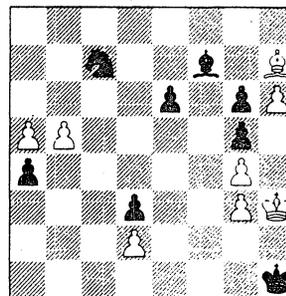
c1c3 0341.22

Draw

1.Bd4+! Kxd4 2.a8Q Re1+ 3.Kb2 c3+ 4.Kxb3 Rb1+ 5.Ka2 Rb2+ 6.Ka3 Bd6+ 7.Ka4 Ra2+ 8.Kb3! Rxa8 stalemate.

The knight speeds merrily to its quiet sepulchre in H30, while in H31 it doesn't move at all. Forcing play is absent from the solution to H30, while H31 is packed with necessity. White effectively doing nothing but react to the black hammer-blows. It is true that H31 has a lighter, more economical, construction than H30, and the play is longer, but in the light of the aforementioned defects it is far from satisfactory to place H31 on the same level as H30, which was composed 16 years earlier. The most stringent critique must give preference to H30.

H32: *Shakhmaty*, 1924.



h3h1 0043.65

Draw

H32 shows incarceration by underpromotion to bishop. 1.Bg8 Bxg8 2.h7 Bxh7. By decoying the black bishop from f7 to h7 White defers the black mating threat from three to four moves - e6-e5, followed by Bg8-d5-g2. This allows the white pawn time to promote: 3.b6 Sa6 4.b7 Sb8! Otherwise White achieves stalemate simply by the further advance and sacrifice of his pawns. 5.a6 Bg8 6.a7 e5 7.a8B!!, and the black knight cannot move because of b7-b8Q. The promoted bishop is incarcerated! (In another study published in *Deutsche Schachzeitung* in *1908 Black achieves just such an incarceration.)

*Note. Herbstman chooses not to give the position, which is this:

A. A. Troitzky (Vilna)

Deutsche Schachzeitung (vi1908)

dedicated to F. Amelung in Riga

h8f8 0040.54 a8d1 a6b6e6f7h6a3b2e7h7 7/6.

The irregular stipulation reads: "White to move - can either side win?"

Solution: 1.Be4 (for a7) Bc2/i 2.Bxc2 a2/ii

3.Bb1/iii a1B, and now that White dare not move his bishop (because of promotion with discovered check), neither side can win!

i) a2? 2.Bb1, followed by 3.b7 and 4.b8Q+.

ii) An attempt to win. If b1Q 3.Bxb1 a2 4.Bxa2 stalemate.

iii) 3.b7? b1Q. Or 3.a7? a1Q. Black's reply is his only move.

 In introducing the present article I laid emphasis on the claim that Troitzky established a link between the game and the study *at the level of ideas*. The studies we have seen demonstrate the expression in artistic form of the general principles that underlie the game of chess and its tactics: the struggle for space, for time, for material; domination, rejection of material on offer, breakthrough, sacrifice and suchlike. But the highest expression of this link at the level of ideas is to be seen in the remarkable investigation of the struggle of king and two knights against king and pawn, on which Troitzky laboured many years. [The reader can roughly quantify 'many' for himself by careful reading of Troitzky's 'autobiography', scheduled for EG's next issue. Tr.]

As every master knows, it is a paradox of chess that two knights are unable to checkmate the 'bare' king if the defence, by convention black, plays correctly, since the mating move must be preceded by a position of stalemate. A few examples of positions where the black side loses because he has a pawn are to be found in the older chess treatises: the pawn's presence gives Black a move so that the stalemate is inoperative. In the latter half of the 18th century Taruffi and Chapais gave some specific examples of this possibility: in the *Schachzeitung* of 1862-63, and in the fourth edition of the *Handbuch*, Von der Lasa reproduced three such positions taken from manuscript sources in his sumptuous library. In the 19th century Bledow, Mendheim, Bolton, Kling and Horwitz, Guretzky-Cornitz, H.F.L.Meyer, P.K.Plotitsyn and others widened the scope of ideas applying to this most interesting of endgames, but they drew no further, more specific conclusions. It was left to Troitzky in his articles published from 1906 to 1910 in the *Deutsche Schachzeitung* to unveil to the chess world the principles underlying the struggle of two knights against pawn (or selected pawns). He defined precisely on which squares a single pawn must be held for the win to be unconditional; he established a group of exceptions, and he set down the pawn's positions for a loss or a draw depending on certain precise circumstances; and he demonstrated techniques for halting pawns and

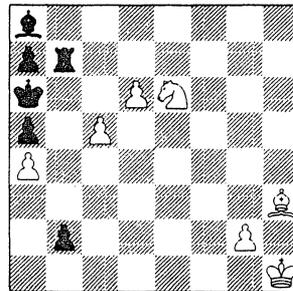
gradually confining the black king, so as to drive the latter into a mating net by application of the dynamic interacting potential of the white men.

In Troitzky's own words: "Wherever the black king may be White wins without exception only in the cases where a black pawn is blocked on a4, b6, c5, d4, e4, f5, g6, h4 or higher up the board - 26 cases in all. (The rook's pawn case was absorbed into this number only after Troitzky had pin-pointed the winning combination involving the sacrifice of a knight.) And for the following pairs of pawns: h3 and f4 (a3 and c4), e5 and f4 (d5 and c4), f6 and g5 (c6 and b5), h6 and g5 (a6 and b5), c4 and d2 (f4 and e2) - 38 cases in all. In addition cases could occur where a chance middle-game exchanging combination gives rise to an exceptional losing position with the pawn on any square at all, or even with several pawns. From the foregoing it follows that this endgame is not as abstruse or arcane as was thought - one should not run away from it."

Troitzky was not content with these specific research results: he used them for artistic ends as well, creating a series of noteworthy studies based on the two knights against pawn struggle. The reader will find in the present work a great number of studies that in one way or another link with this struggle: in some it is the central idea, in others it relates to a variation, or to a try, or to black counterplay, and so on.

This survey of Troitzky's work, modest as it has been, would be incomplete without taking account of the remarkable ability of our composer not only to discover the essential core and beauty of this or that single chess idea, but to combine several of them together into one unified product.

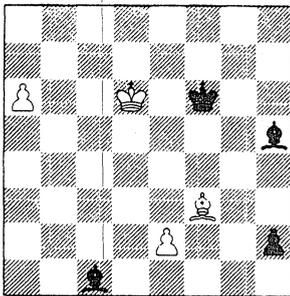
H33: *Deutsche Schachzeitung*, 1914.



h1a6 0341.43

Win
 1.Sc7+ Rxc7 2.dxc7 b1R+!! 3.Kh2 Rb7! 4.c8R!!
 Rb4 5.Rxa8 Kb7 6.Rc8 Rxa4 7.Bd7 R- 8.c6 wins.

H34: 1917



d6f6 0070.21

Draw

1.a7 Bf4+ 2.Kd7! Bg4+ 3.Kd8! Bxf3 4.exf3 h1Q
5.a8Q Qh8+ 6.Kd7 Qxa8 stalemate. But not
3.Kc6? Bxf3 4.exf3 h1B!! wins, nor 3.Ke8? Bxf3
4.exf3 h1R!! wins.

In H33 we see a rook promotion in black counterplay aiming at subsequent incarceration of a bishop with paralysing pin of the promoted rook - a trap which White overtrumps by himself choosing to promote to a rook. In H34 White attains stalemate by extremely subtle play that skirts round two otherwise winning underpromotions of a black pawn to bishop and rook. The theme of two underpromotions in black play is combined with the 'mirror' stalemate theme.

Even this swift survey of the treasure-house of ideas enables us to look at the excellence of the structure of chess poetry erected by Troitzky in pursuit of his chosen activity. We should underline that the full flowering of his talent is taking place in the era following the October Revolution. That is why we are entitled to recognise Troitzky as the teacher and moral inspiration of Soviet study composers.

3.

It remains for us to consider the theory of the chess study worked out by Troitzky and published by him already in 1910. [The late John Selman tracked down the *Niva* article, secured a translation, and it appeared in *EG11* in 1968.] We shall take a series of extracts from his article, practically forgotten today, "The fundamental principles of the art of composing chess studies".

"A chess study is a chess position on the chessboard that could have occurred in a game where one side, white by convention, offers to conclude the game either by winning or by forcing a draw.

"A study may arise in either of two ways: from a practical game, or by an effort of creativity. In the latter case the author should make the position not only possible in general, but such that it

might have arisen through normal moves in a game.

"However varied study themes may be, their combinations can still be placed in one of two categories: 1) middle-game combinations, and 2) endgame combinations.

"As with all artistic endeavour the study can be considered from the standpoint of form and of content.

"The content of a study, considered as an artistic product, is the resolution of an advantage present in the position or in having the move. [But not an advantage in material. AH.]"

Thus far Troitzky on the study's essence and origin. His opinion runs counter to the standpoint adopted by certain influential West European masters.

In his introduction to the collection of Rinck's studies Johann Berger wrote: "The straightforward relationship of the study to the practical ending is that the study brilliantly illustrates and demonstrates *important exceptions* to a general rule. (The italics are mine. AH) These exceptions may sometimes cross boundaries that could never happen in the practical game."

H.Rinck, for example, who is one of the world's leading composers, defines the essence of the study in the same way.

And J.Mieses writes: "Studies essentially represent significant additions to theory's endgame chapter, demonstrating exceptions to general rules."

Two things stand out from such definitions: the first is the connection of the study only with the endgame phase of chess, and the second is the 'exception' relationship of the study to the bases of chess, namely chess theory.

Troitzky's ground rules laid down 24 years ago stress the study's link not only to the endgame but to the middlegame phase, a link whose strength is corroborated by the whole story of the development of the study and which today, now that we have the very specific themes such as positional draw, incarceration and pinning, and more themes from problem-dom, has received such a dazzling impulse to creativity. This is our first point. Our second is that Troitzky asserts that the study is not at all about exceptions to general rules of chess theory. Such an attitude is very superficial, being based merely on the relative strengths of the competing forces, something that applies only to primitive endgames and takes into account only, for example, cases such as king and queen against king, or king and rook against king, but not applying to involved positions where evaluation must consider not just the material *strength* but also the *situation*, chiefly the

situation with respect to time, to space and to the material elements with their mutual supports and interactions. In a study White is the weaker side (if White is the stronger then, according to Troitzky, the study ceases to be artistic), so that when White wins or draws it is not because he demonstrates an exception to the rules but because, being inferior in material, he is superior in time and in space, his pieces working together in a coordinated and harmonious way. In a study it is indeed the stronger side that makes out, but the strength is transmuted: it relates to the quantity and quality of the pieces, and is expressed in other components characteristic of chess as a game.

[AJR: For what it is worth, my considered view is that Black's moves in a study are determined by applying (a sophisticated interpretation of) current endgame theory, which White nevertheless outwits: one can call the resultant entity either 'an exception to the rules' or 'the realisation of something deeper than material'. Troitzky, with Herbstman's assistance, has contributed a priceless analytic appreciation of that 'something deeper', but the alleged conflict is, I suggest, largely artificial.]

Troitzky dwells at length on *technique* in composing studies.

"A study acquires value as a work of art from the complexity and richness of its idea. What is most attractive about chess as a game is the element of *contest*. It is this that has to be given expression by allowing the defeated side a range of defensive devices in the course of the solution. The black pieces must not be too cramped: their positioning must give rise to *many variations*, and play should not be too short."

In his description of the embryology of the study, Troitzky refers to broadening, deepening and artistic execution - at the level of ideas.

"If variations are not inherent in the theme they can be introduced as consequences of manipulating the theme to complicate it and thereby enhance its significance. Even the simplest of moves such as for example a knight check with attack on the queen, becomes interesting if it arises in many variations.

"The deepening of an *idea* occurs with the unearthing of that position out of which the position develops that was chosen for the theme in the first place. The introductory moves of the solution, leading from the first position to the second, may be called preparatory. The deepening of *themes* is greater the more links there are between the play that follows and the preparatory play; and also the greater the freedom of the

struggle, in other words the greater the number of variations that arise. Therefore moves of a brutally forcing nature, such as a series of sacrifices whose refusal is out of the question, should be as few as possible. If a move threatens something then the threat should be weak, in the sense that it ought to be distant rather than immediate. Quiet moves of the preparative waiting (ie, zugzwang) or pure waiting (tempo move) types are excellent. The exchange of the weakest piece for the strongest must be judged inartistic and therefore inadmissible. The least objectionable capture is of a very weak pawn or the exchange of the strongest piece for the weakest (ie, a sacrifice)." These two last precepts apply to the first move or to the introductory moves. Most recently Troitzky has added the following statement: "I sanction the addition of extra material (to provide scope for combinations and sacrifices) in my own studies practically only in the case of two knights against pawn(s) and specifically on the grounds of the fact that White in some way or another has to have the advantage of *two whole pieces*."

Troitzky places extraordinary value on artistic presentation, which "at all stages demands the observance of the principles of economy, both of means and of force. Not a single man should be present that does not play some part in the solution. Sometimes this part can be entirely passive. For instance, at most one black piece can be present to prevent a second solution. In this case the additional black force must be the minimum necessary to ensure the desired outcome. In general, in pursuit of any aim the composer should not add any new man to the board until he has convinced himself that a rearrangement of the existing pieces, or the replacement of one or more, will not do the trick. The newly introduced man must be no stronger than the duties required of it. This relates as much to black force as it does to white.

"Purity of stalemate, mate and other positions will follow as consequences of observing these requirements."

Later, while establishing the principle of 'the exclusivity of a theme', [This phrase -
 - is not explained. Tr.] Troitzky added the following to the above precepts: "As regards the strict adherence to these rules, I will confine myself to the view that minor deviations are sometimes unavoidable. There are themes which cannot be implemented otherwise, and some of these are of considerable interest."

Thus established by Troitzky, the theory of the

chess study retains its validity for us today. We have recalled the classic and romantic themes in Troitzky's work. A conclusion may be drawn from all the foregoing: taking his creative output together with his theoretical pronouncements, we have to acknowledge that all in all the forty years of Troitzky's artistic endeavour have been played out under the banner of realism, to wit, expressing in the study the dazzling concepts and principles encountered in practical play. Our slogan for creativity for this stage in study development has to be - *realism in the study*. For the reader who will lovingly and deeply feel the subtleties of chess poetry that saturate the present collection there will burst open the whole evolution of the contemporary chess study in its broad and majestic panorama, to illuminate the way to the creative possibilities of the future.

A.O.Herbstman

3rd 'Hero-Towns' Match

- 50th Anniversary of Victory in Europe (1945)

This formal tourney was organised on the occasion of the 50th anniversary of victory in Europe, participation in this now almost traditional multi-genre event was restricted to the towns awarded 'hero' status for war-time valour: Volgograd (Stalingrad), Kiev, St Petersburg (Leningrad), Minsk, Moscow, Odessa and Brest. In the event Brest was included with Minsk, and the town of Tula was added.

Set theme: "Win or draw, by mutual sacrificial offer of an undefended major piece type (Q-Q, R-R)"

V.Vinichenko (Novosibirsk) was judge for the studies section.

7 teams entered 10 entries from 10 composers, 8 studies in the provisional award.

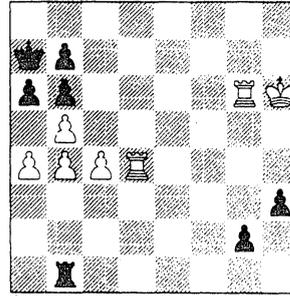
Text of award (by judge, organiser): The all-genres result -

- Moscow - 23.5 points
- Tula - 19.5 points
- Leningrad - 19 points
- Kiev - 18.5 points
- Volgograd - 17 points
- Minsk+Brest - 13 points
- Odessa - 12.5 points

The standard achieved was very high indeed, and in all genres.

No 10018 A.Kotov (Leningrad region) and V.Razumenko (St Petersburg)

1st place 3rd 'Hero-Towns' Match



h6a7 0500.45

Win

No 10018 A.Kotov and V.Razumenko 1.a5/i axb5 2.axb6+ Ka6 3.c5 g1Q/ii 4.Rxg1 (Rd8? Qe3+) h2 5.Rh1/iii Re1 (Rd1;Rd2(Rd3)) 6.Re4/iv Rf1 7.Rf4 Rg1 8.Rg4 Re1 9.Rg6 Rf1 10.Rc6 Rxl 11.Rc8 and 12.Ra8 mate.

i) Black's advanced pawns mean that White must act fast. The text move threatens 2.axb6+ and mate. Not the symmetrical 1.c5? axb5 2.cxb6+ Ka6 3.a5 Rxb4, drawn.

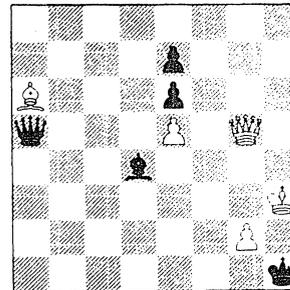
ii) h2 4.Rd8 h1Q+ 5.Kg7 wins.

iii) 5.Rxb1? h1Q+ 6.Rxh1 stalemate. Or 5.Rd8? h1Q+ 6.Rxh1 Rxh1+, drawn by perpetual check.

iv) 6.Rc4? Rxh1 7.Rc2 Ra1 8.Rxh2 Rh1 9.Rxh1 stalemate.

No 10019 V.Anufriev (Tula)

=2nd/3rd places 3rd 'Hero-Towns' Match



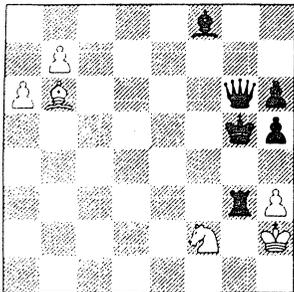
h3h1 4040.22

Win

No 10019 V.Anufriev "The presence of bishops on opposite colours with reduced force gives Black drawing chances." 1.Qc1+ Bg1 2.Bb7/i Qb5 3.Bc6/ii Qf1 4.Qf4 (Qe1? Qf3+;) Qc1 5.Bb7 (Ba8? Qc8;) Qb1 6.Be4 Qf1 7.Bf3, winning by zugzwang, but not the reciprocal variety, as with the move White can win by 8.Qc4 Qf2 9.Qe4 Qf1 10.Qf4.

- i) 2.Qc6? Qxe5?? 3.g4+ Qd5 4.Bb7 wins, but 2...Qb6 3.Qa8 Qa7 draws.
 ii) 3.Ba8? Qb8 4.Be4 Qh8+ 5.Kg4 Qg7+ 5.Kf3 Qg3+. Or if 3.Bf3? Qd3 4.Qc2 Qe3 5.Qd2 Bf2 6.Qd1+ Be1 7.g4+ Kg1, and if anything Black has the better of it.

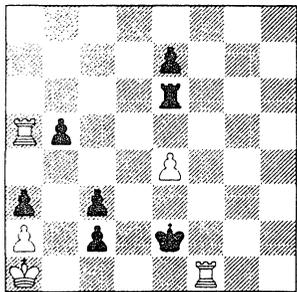
No 10020 Oleg Pervakov (Moscow)
 =2nd/3rd places 3rd 'Hero-Towns' Match



h2g5 3341.32 Win
 No 10020 Oleg Pervakov 1.b8Q Bd6/i 2.Qxd6 Rg2+/ii 3.Kxg2 Kh4+ 4.Sg4 Qxd6 5.Se5, with:
 Qxb6 6.Sf3 mate, or
 Qxe5 6.Bd8+, or
 Kg5 6.Sf7+, or
 Qd2+ 6.Bf2+ Kg5 7.Sf3+.

- i) Rb3 2.Qd8+ wins. Kf5 2.Qxf8+. Or h4 2.Qe5+ Qf5 3.Se4+ Kg6 4.Qxf5+ Kxf5 5.Sxg3+. Or Rf3 2.Bd8+ Kf5 3.Qb1+.
 ii) Qxd6 3.Se4+ Kf4 4.Sxd6 Ra3 5.a7 Ra2+ 6.Kh1 Kg3 7.Sb5 and 8.Sc7 wins.
 "A sprinting distance study with a bright, unexpected final. The white pieces and pawns strewn over the whole board interact in a most surprising way."

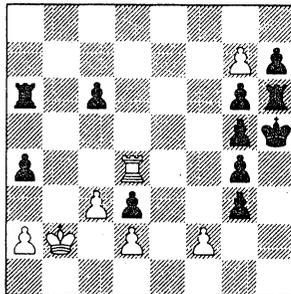
No 10021 A.Kotov and V.Razumenko
 =4th/5th places 3rd 'Hero-Towns' Match



a1e2 0500.25 Draw
 No 10021 A.Kotov and V.Razumenko 1.Rc1/i

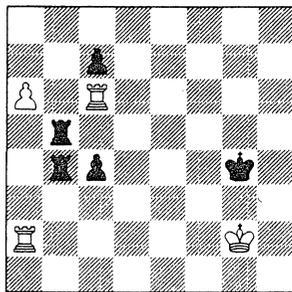
- Kd2/ii 2.e5/iii Kxc1/iv 3.Ra4/v b4 4.Rxb4 Rb6 5.e6 Rb7 6.Rb5 Rb8 7.Rb4 Rb6 8.Rb5 draw, White is safe in a positional draw port where there is a perpetual and mutual piece offer.
 i) 1.Rxa3? b4 (Kxf1). 1.Rh1? Rf6.
 ii) Rd6 2.Rxc2+ Rd2 3.Rc1 b4 4.Kb1 Rb2+ 5.Ka1 Kd2 6.Rh1 draw. Or Rxe4 2.Rxb5 Kd2 3.Rd5+ Kxc1 4.Rd1+ Kxd1 stalemate.
 iii) 2.Rxc2+? Kxc2 3.Rxb5 Rxe4 4.Rb1 Kd2 wins. Or 2.Rxb5? Kxc1 3.e5 Kd1 4.Rd5+ Ke1. Or 2.Ra4? bxa4 3.e5 Rb6 4.e6 Rb1+ mates.
 iv) Rxe5 3.Rxb5 Rxb5 4.Rxc2+, perpetual check.
 v) 3.Rxb5? Kd1 4.Rd5+ Ke1 wins.

No 10022 S.Abramenko (Volgograd region)
 =4th/5th places 3rd 'Hero-Towns' Match



b2h5 0700.58 Win
 No 10022 S.Abramenko 1.fxg3 a3+ 2.Ka1/i c5 3.Re4/ii Re6 4.g8S c4 5.Re5 (Re3? Rb6;) Rb6 6.Rb5 Re6 7.Rb1 Re1 8.Sf6 mate.
 i) 2.Kc1? would obstruct the rank.
 ii) 3.g8S? cxd4. Or 3.g8Q? Rf6.
 "The theme resembles that of the study placed first, but form and content are markedly dissimilar!"

No 10023 I.Bondar (Brest)
 =6th/7th places 3rd 'Hero-Towns' Match



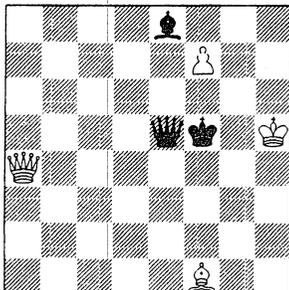
g2g4 0800.12 Win
 No 10023 I.Bondar 1.Rxc4+ Rxc4 2.a7, with:

Rb2+ 3.Rxb2 Ra4 4.Rb4+ Rxb4 5.a8Q wins, or Rc2+ 3.Rxc2 Ra5 4.Rc4+ Kf5 5.Rc5+ Rxc5 6.a8Q wins.

"The one study submitted where the thematic sacrifices do not depend on a background of stalemate."

"The known deflection idea, but in two variations, by both white and black. For the first time ever?"

No 10024 A.Zinchuk (Kiev)
=6th/7th places 3rd 'Hero-Towns' Match



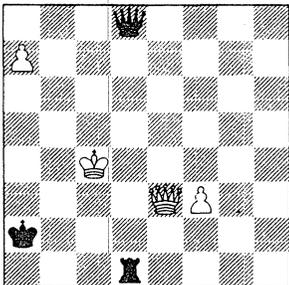
h5f5 4040.10

Win

No 10024 A.Zinchuk 1.fxe8Q/i Qh2+ 2.Qh4 Qe2+ 3.Kh6 Qxe8 4.Bh3+ (Qf2+? Kg4;) Ke5 5.Qe1+ Kf6 6.Qf2+ Ke7 7.Qc5+ Kf7 8.Qf5+ Ke7 9.Qe5+ Kf7 10.Qg7 mate.

i) Not the weakest of first moves! This is the highly unusual case in a study of a white promotion to queen winning while the promotion to rook leads to stalemate. It is a kind of psychological double bluff - the study move is like a game move after all! 1.fxe8R? Qh2+ 2.Qh4 Qe2+ 3.Kh6 Qa6+ 4.Kg7 Qg6+ 5.Kf8 Qg7+ 6.Kxg7 stalemate.

No 10025 A.Motor (Odessa)
8th place 3rd 'Hero-Towns' Match



c4a2 4300.20

Win

No 10025 A.Motor 1.Qb3+ Ka1 2.Qxd1+ Qxd1 3.a8Q+ Kb2 4.Qb8+ Ka2 5.Qa7+ Kb1 6.Qb6+

Ka2 7.Qa5+ Kb1 8.Qf5+ Ka1 9.Qe5+ Kb1 10.Qe4+ Ka2 11.Qd5 Qb3+/i 12.Kd4 Ka1 13.Qe5 Kb1 14.Qe1+ Kc2 15.Qe2+ Kb1 16.Qd3+ Ka1 17.Qc3+ wins.

i) There is an unfortunate dual after Qe1 12.Kd3+ Ka1, as 13.Qd4+ wins as well as the intended 13.Qa8+.

Lenin-120

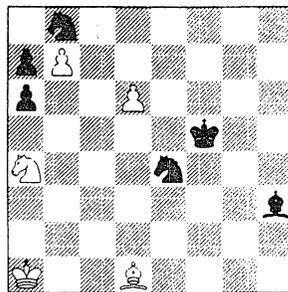
This formal tourney official called:

All-Union State Committee for Sport, to commemorate the 120th anniversary of the birth of Vladimir Ilyich Lenin, 1989

was judged by V.Kozyrev and L.Mitrofanov, under the chief judge M.Marandiuk and organising judge K.Tarnopolsky.

The provisional award was published in No.12 of Bulletin of Central Chess Club of USSR, iv91. 155 entries received, 15 in the provisional award. The confusion, not to say chaos, of having multiple judges (a decision made in 1989, obviously because no single judge wanted to be seen to be so closely associated with Lenin at a time of collapsing communism and burgeoning glasnost!), of whom the most experienced was absent-minded, and the others inexperienced, to judge this tourney, is strongly hinted at in the award preamble - which named names. Outside observers can afford to smile!

No 10026 An.Kuznetsov (Moscow region) and O.Pervakov (Moscow)
1st prize Lenin-120



a1f5 0047.22

Draw

No 10026 An.Kuznetsov and O.Pervakov 1.d7 Sxd7 2.Bc2 Sb8/i 3.Sc5 Ke5 4.Bxe4 Kd4 5.Sd3 Bf1 (Kxe4;Sf2+) 6.Sf2 Ke3 7.Sh1 Bc4 8.Bg2, with

Kf4 9.Sf2/ii Kg3 10.Sd1 Bb3 11.Se3 Kf2 12.Bd5 draw, or

Be6/iii 9.Sg3 Kf2 10.Sh5 Bf7 11.Sf4 Kg3 12.Bd5 draw.

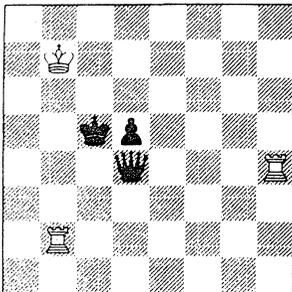
i) Bg2 3.Sc5 Sb8 4.Bd3 Ke5 5.Sxa6 draw.

ii) Black intends Be2-f3. If 9.Bh3? Kf3 10.Kb2 Bd5 11.Kc3 a5, winning.

iii) Planning Bg4-f3. If 9.Bf1? Kf3 10.Kb2 Bd5 wins.

"Doubling a known idea is a step in the right direction."(VK) "The choice of strategy, the whimsical and picturesque minor piece movements, the many forks, build up the impression of a production on a large scale."(LM)

No 10027 D.Gurgenidze (Georgia)
2nd prize Lenin-120



b7c5 3200.01

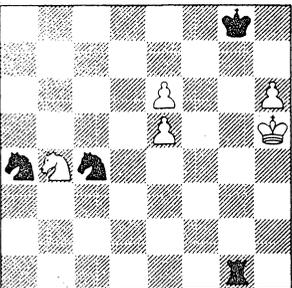
Win

No 10027 D.Gurgenidze 1.Rb5+/i Kxb5 2.Rxd4 Kc5 3.Rd1 d4 4.Kc7 Kd5 5.Kd7, with Kc4 6.Kd6 d3 7.Ke5 Kc3 8.Ke4 wins, or Ke4 6.Kd6 d3 7.Kc5 Ke3 8.Kc4 wins.

i) 1.Rc2+? Qc4 2.hRxc4+ dxc4 3.Rc1 Kb5 4.Kc7 Kc5 5.Kd7 Kd5 draws,

"Synthesis of Réti and Amelung ideas. It is not easy to grasp how White loses a tempo. The secret is that he does it not with the rook, but with the king. The well known dual in the Réti (Re1/Re2) detracts from this witty study."(LM)

No 10028 N.Ryabinin (Tambov region)
3rd prize Lenin-120



h5g8 0307.30

Draw

No 10028 N.Ryabinin 1.h7+ Kg7/i 2.h8Q+ Kxh8 3.e7 Rg8 4.Sd5 Re8 5.Kg6 Sxe5+ 6.Kf6, with

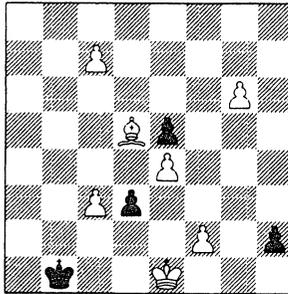
Kg8 7.Sc7 Sg4+ 8.Ke6 Sc5+ 9.Kd6 Sb7+ 10.Ke6 Sd8+ 11.Kd6 Sf7+ 12.Ke6 Sg5+ 13.Kd6 Se4+ 14.Ke6 Sc5+ 15.Kd6 Se4+ 16.Ke6 Sg5+ 17.Kd6 Sf7+ 18.Ke6 Sd8+ 19.Kd6 Sb7+ 20.Ke6 Sc5+ 21.Kd6 draws, or

Sc5 7.Sc7 cSd7+ 8.Ke6 Sf8+ 9.Kf6 Sh7+ 10.Ke6 Sg5+ 11.Kd6 Se4+ 12.Ke6 Sc5+ 13.Kf6 Se4+ 14.Ke6, and so on.

i) Kxh7 2.e7 Rg8 3.Sd5.

"The fast rising composer assembles knight wheels in a surprising manner. The scale is astonishing."(VK)

No 10029 A.Sochniev (Leningrad)
4th prize Lenin-120



e1b1 0010.53

Win

No 10029 A.Sochniev 1.Kd2/i h1Q 2.c8Q Qc1+ 3.Kxd3 Qf1+ 4.Kd2/ii Qxf2+ 5.Kd3 Qf1+ 6.Ke3 Qe1+ 7.Kf3 Qxc3+ 8.Kf2 Qd2+/iii 9.Kg3 Qc3+ 10.Kh4 Qxc8 11.g7 Qd8+ 12.Kh5 Qe8+ 13.Kh6 wins.

i) 1.c8Q? Ke1 2.Qh3 d2+ 3.Kf1 d1Q+ 4.Kg2 Qg1+.

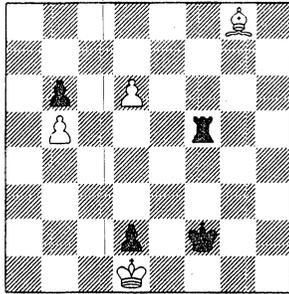
Therefore bPd3 must first be blockaded.

ii) 4.Ke3? Qe1+ 5.Kf3 Qxc3+.

iii) Qxc8 9.g7 Qc2+ 10.Kg3 Qc3+ 11.Kg4 Qc8+ 12.Kh4 Qd8+ 13.Kh5 Qe8+ 14.Kh6 winning.

"The accepting and the spurning of sacrifices are equally attractive. The pointed move 4.Kd2!! forces Black to capture wP2, so that White later uses this square to escape the checks."(LM)

No 10030 V.Kondratev and A.Kopnin
(Chelyabinsk)
5th prize Lenin-120



d1f2 0310.22

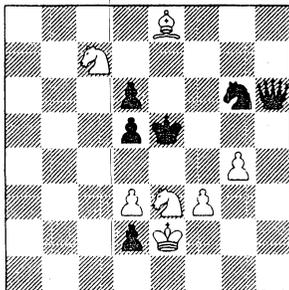
Draw

No 10030 V.Kondratev and A.Kopnin 1.d7/i Rf8 2.Bc4/ii Ke3 3.Bd3zz Rd8 4.Bf5 Ra8 5.Bb1zz Rg8 6.Bg6 Rh8 7.Bh7 Rb8 8.Bc2 Rf8 9.Bd3 Rd8 10.Bf5 Ra8 11.Bb1 Rg8 12.Bg6 Rh8 13.Bh7 Rb8 14.Bc2 drawing, because wB has available a corresponding square for every possible move by bR!
i) 1.Kxd2? Rf6 2.d7 Rd6+ 3.K- Rxd7, and the win can be found 'in Averbakh'.
ii) 2.Bh7? Rd8 3.Bf5 Ke3 4.Be6 Kd3 5.Bf5+ Kc3 6.Be6 Ra8 7.Ba2 Rxa2 8.d8Q Ra1+ 9.Ke2 Re1+ 10.Kf2 d1Q. Or 2.Be6? Ke3 3.Bc4 Rd8 4.Be6 Kd3.

"A classic setting for a reciprocal zugzwang record."(VK) "Might have been placed higher had it not been for an earlier study (Korolkov JT) by the same pair. It smacks of the short who-dun-it: goody and baddy both have to stay alert."(LM)

No 10031 A.Sochniev

1st honourable mention Lenin-120



e2e5 3015.33

Win

No 10031 A.Sochniev 1.d4+ Kf6 2.g5+ Kxg5 3.Se6+ Kh5 4.Sf5 Qh8 5.Kxd2 Qf6 6.Kc3/i Qh8 7.Kb4 Qf6 8.Kb5(Ka5) Qh8 9.Kb6 Qf6 10.Kc6 Qh8 11.Kxd5 Qf6 12.Kc6 Qh8 13.Kb6 Qf6 14.Ka6 Qh8 15.Ka5 Qf6 16.Kb4 Qh8 17.Kc3 Qf6 18.Kd2 d5 19.Kd1 Qxf5 20.Sg7+ Kg5 21.Sxf5

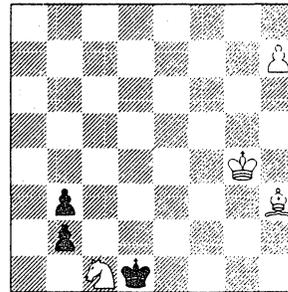
Kxf5 22.Bxg6+ Kxg6 23.Ke2(Ke1) Kg5 24.Kf1 Kf5 25.Kg2 Kf4 26.Kf2 Kg5 27.Kg3 Kf5 28.f4 Ke4 29.Kg4 Kxd4 30.f5 Ke5 31.Kg5 d4 32.f6 Ke6 33.Kg6 d3 34.f7 d2 35.f8Q d1Q 36.Qe8+ Kd6 37.Qd8+, and 38.Qxd1 wins.

i) 6.Kd1? This intends Qh8? 7.Ke2 Qf6 8.Kf2 Qh8 9.Kg3 Qf6 10.f4 Qg5+ 11.Kf2, but Black has Qxf5 7.Sg7+ Kg5 8.Sxf5 Kxf5 9.Bxg6+ Kxg6 10.Ke2 Kg5 11.Kf1 Kf5 12.Kg2 Kf4 13.Kf2 Kg5 14.Kg3 Kf5 15.f4 Ke4 16.Kg4 Kxd4 17.f5 Ke5 18.Kg5 d4 19.f6 d3 20.f7 d2 21.f8Q d1Q draw, since 22.Qe8+ and 23.Qd8+ is in vain with bPd6.

"The deep logical idea is as modern as can be, though constructed round an everyday pawn ending."(VK) "wK completes a marathon of honour to emphasise the remarkable idea. But there's some shortage of piquancy."(LM) The study was excluded, because of a defect, from the 1987 All-Union tourney honours list.

No 10032 A.Grin (Moscow)

2nd honourable mention Lenin-120



g4d1 0011.12

Win

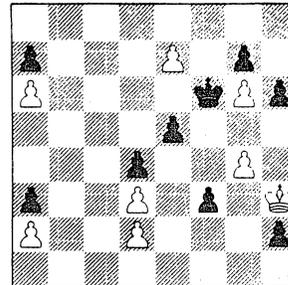
No 10032 A.Grin 1.Se2 Kxe2 (Kd2,Sc3) 2.Bf1+ Kd2/i 3.Bd3 Kxd3 4.h8Q b1Q 5.Qh7+ wins.

i) Kxf1 3.h8Q b1Q 4.Qh1+ wins.

"In the good old style that has universal charm. We love the alternating offers of wS and wB."(LM)

No 10033 M.Zinar

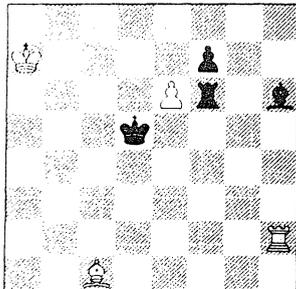
3rd honourable mention Lenin-120



h3f6 0000.78 Draw
 No 10033 M.Zinar 1.e8S+/i Ke7 2.Kxh2 Kxe8
 3.Kg3 Ke7 4.Kxf3 Kf6 5.Ke4 Ke6 6.Kf3 Kd5
 7.Kg3 Ke6/ii 8.Kf3 Kf6 9.Ke4 Kxg6 10.Kd5/iii
 Kf6 11.Kc6 Ke6 12.Kb7 Kd7 13.Kxa7 Kc7
 14.Ka8 g6 15.a7 e4 16.dxe4 h5 17.gxh5/iv gxh5
 18.e5 h4 19.e6 h3 20.e7 h2 21.e8S+ Kc8 22.Sd6+
 Kd7 23.Kb8 h1Q 24.a8Q Qxa8+ 25.Kxa8 Kxd6
 26.Kb7 Ke5 27.Kc6 Ke4 28.Kc5 Kd3 29.Kd5
 Kc2 30.Kxd4 Kb2 31.Kd3z Kxa2 32.Kc2 Ka1
 33.d4 a2 34.d5, and instead of the white king
 being stalemated on h8 we find the black king
 stalemated on a1!

- i) 1.Kxh2? Kxe7 2.Kg3 Kf6 3.Kxf3 Kxg6 4.Ke4
 Kg5.
 ii) e4 8.Kf4 exd3 9.Kf5 draw.
 iii) 10.Kxe5? Kg5 11.Kd5 Kxg4, and White will
 lose.
 iv) 17.e5? h4 18.e6 h3 19.e7 h2 20.e8S+ Kc8
 21.Sd6+ Kd7 22.Kb8 h1Q 23.a8Q Qxa8+
 24.Kxa8 Kxd6 25.Kb7 Ke5 26.Kc6 Kf4 27.Kd5
 Kxg4 28.Kxd4 Kf4 29.Kc4 g5 30.d4 g4 31.d5
 Ke5 32.Kc5 g3 33.d6 g2 34.d7 g1Q+.

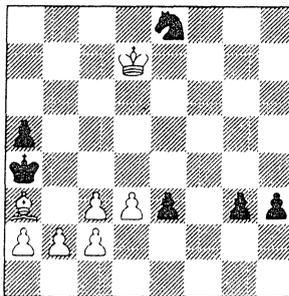
No 10034 A.Dolgov (Krasnodar province) and
 A.Maksimovskikh (Kurgan region)
 4th honourable mention Lenin-120



a7d5 0440.11 Win
 No 10034 A.Dolgov and A.Maksimovskikh 1.e7
 Re6 2.Ba3 Bc1/i 3.Rh5+ Kd4/ii 4.Bc5+ Kc4
 5.Kb7 Be3 6.Ba3/iii Kb3 7.Bd6 Bf4 8.Bc5 Kc4
 9.Kc8 Be3 10.Ba3 Kb3 11.Bd6 Bf4 12.Bc5 Kc4
 13.Kd7 wins, Be5 14.e8Q Rxe8 15.Kxe8 Kxc5
 16.Rxe5+ wins.
 i) Be3+ 3.Kb7 Be5 4.Rd2+ Kc4 5.Bxc5 Kxc5
 6.Rd7 f5 7.Kc7 f4 8.Kd8 f3 9.e8Q Rxe8+
 10.Kxe8 Kc4 11.Rf7 wins.
 ii) Ke4 4.Rh1 Bxa3 5.Re1+ Kf3 6.Rxe6 Bxe7
 7.Rxe7 f5 8.Kb6 f4 9.Kc5 Kg3 10.Kd4 f3 11.Ke3
 f2 12.Rg7+ wins.
 iii) A new cycle of systematic movement involv-
 ing 5 pieces begins here. Not 6.Bd6? Bf4 7.Ba3
 Be5 8.Rf5 Bb2 9.Bd6 f6 10.Kc8 Be5 11.Ba3 Bb2

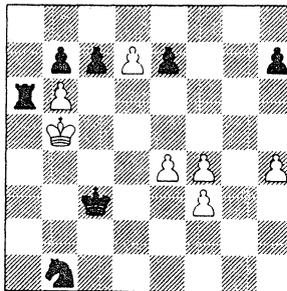
12.Bd6 Be5, positional draw.

No 10035 I.Bondar (Brest region)
 5th honourable mention Lenin-120



d7a4 0013.54 Win
 No 10035 I.Bondar 1.Kc6/i h2 2.Bf8 h1Q+ 3.Kb6
 Qh6+ 4.Bxh6 Sf6 5.Kb7/ii Sd5 6.c4 e2 7.cxd5
 e1Q 8.Bf8 Qb4+ 9.Bxb4 Kxb4 10.d6 wins.
 i) 1.c4? Sf6+ 2.Kc7 Sd5+ 3.cxd5 Kb5 4.Kb7 a4
 5.Bd6 a3. So White has to play for mate.
 ii) 5.Kc6? Sd5, and 6.Bf8 Sb4 7.cxb4 axb4, or
 6.Kxd5 e2 7.c4 e1Q 8.Bf8 Qb4.
 "What a pity that the bright, interesting play
 finishes so prosaically."(LM)

No 10036 F.Bondarenko (Dnepropetrovsk)
 Commendation Lenin-120



b5c3 0303.64 Win
 No 10036 F.Bondarenko 1.bxc7 Sa3+ 2.Kc5
 Rc6+/i 3.Kd5 Rd6+ 4.Ke5 Sc4+ 5.Kf5 Se3+
 6.Kg5 Rg6+ 7.Kh5 Sfl 8.c8Q+ Kb3 9.Qxb7+
 Kc2 10.Qc7+ Kb3 11.f5 wins.
 i) Ra5+ 3.Kb6 Sc4+ 4.Kxb7 Sd6+ 5.Kc6 Kd4
 6.d8Q Ra6+ 7.Kd7 wins. But David Blundell
 cooks by: Sc4 3.Kd5 e6+ 4.Kc5 Ra5 mate.
 "The veteran's lively study stands out for its
 thought and imagination."(LM)



October 1995

Editorial Board

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C

EG continues its series of complete lists of reciprocal zugzwangs in endings up to 5 men with no more than one pawn. The following, extracted from the appropriate Ken Thompson database by ace programmer Lars Rasmussen of Denmark, displays for the first time all 3130 reci-zugs in the endgame two knights against pawn. The list reads as follows: wK,wS,wS; bK,bP, result when white has the move; result when black has to move. In this = denotes a draw and a number gives the number of moves for the other player needs to win.

1: a8,a6,b8; b6,a7; =;59	44: h7,c7,g8; f7,a6; =;97	87: a5,c1,d3; d2,a6; =;88
2: b8,a8,c2; c6,a7; =;96	45: c6,g5,h8; b8,a6; =;20	88: d5,c1,h7; b6,a6; =;81
3: c8,a8,d7; d6,a7; =;94	46: c6,f4,h8; b8,a6; =;20	89: d5,c1,h5; b6,a6; =;81
4: b7,c8,d1; a5,a7; =;86	47: c6,g3,h8; b8,a6; =;20	90: d5,c1,h3; b6,a6; =;81
5: a6,a8,c7; b8,a7; =;70	48: c6,f2,h8; b8,a6; =;20	91: d5,b3,h3; b5,a6; =;85
6: a6,a8,c6; c8,a7; =;71	49: c6,g1,h8; b8,a6; =;20	92: d5,c1,f8; b5,a6; =;83
7: a6,c7,e8; d8,a7; =;98	50: c6,a3,c5; c3,a6; =;94	93: d5,c1,h2; b5,a6; =;85
8: a6,c8,d6; c7,a7; =;94	51: d6,f6,g3; d8,a6; =;29	94: d5,d1,g1; b4,a6; =;73
9: a6,c7,d5; c6,a7; =;94	52: d6,f6,g1; d8,a6; =;29	95: h5,e7,h4; h3,a6; =;96
10: a6,c4,d6; c5,a7; =;95	53: d6,f2,f6; d8,a6; =;29	96: h5,f6,h4; h3,a6; =;98
11: a6,c4,e5; d5,a7; =;95	54: d6,c1,f6; d8,a6; =;29	97: a4,c7,d5; d7,a6; =;96
12: a6,b3,c5; b4,a7; =;99	55: d6,b3,h3; b6,a6; =;86	98: d4,d8,f3; d1,a6; =;93
13: a6,c5,e4; d4,a7; =;86	56: d6,d3,h7; b6,a6; =;62	99: f4,c1,f2; h5,a6; =;91
14: a6,b2,c4; b3,a7; =;94	57: d6,d3,h5; b6,a6; =;46	100: f4,c1,h2; h5,a6; =;91
15: a6,b1,c3; b2,a7; =;87	58: d6,d3,h3; b6,a6; =;46	101: f4,c7,e3; d4,a6; =;97
16: a6,c1,d3; d2,a7; =;90	59: d6,g3,g5; b6,a6; =;75	102: c3,b8,e8; b5,a6; =;95
17: c6,a8,c7; b8,a7; =;22	60: d6,a2,h1; b6,a6; =;92	103: c3,b8,e8; b5,a6; =;95
18: d6,b8,c1; b6,a7; =;98	61: d6,f2,g5; b6,a6; =;72	104: d3,b8,h2; d1,a6; =;79
19: d6,c1,d3; b5,a7; =;97	62: d6,c1,h8; b6,a6; =;94	105: d3,d8,h2; d1,a6; =;79
20: a5,c7,e8; d7,a7; =;99	63: d6,c1,g7; b6,a6; =;84	106: e3,a7,d2; c3,a6; =;95
21: d5,c8,d7; d5,a7; =;96	64: d6,c1,h6; b6,a6; =;86	107: e3,a7,e1; c3,a6; =;97
22: e3,c8,f4; e5,a7; =;92	65: d6,c1,g5; b6,a6; =;72	108: e3,c7,e1; c3,a6; =;97
23: f3,c1,f2; h4,a7; =;93	66: d6,c1,h4; b6,a6; =;90	109: c3,b8,h8; g2,a6; =;90
24: c8,b3,c7; c6,a6; =;95	67: d6,c1,g3; b6,a6; =;72	110: e3,d8,h8; g2,a6; =;95
25: d8,g3,g5; b8,a6; =;77	68: d6,c1,f2; b6,a6; =;72	111: f3,c7,e3; d3,a6; =;96
26: d8,f2,g5; b8,a6; =;74	69: d6,c1,h2; b6,a6; =;86	112: f2,c7,e1; d2,a6; =;98
27: d8,g1,g5; b8,a6; =;77	70: d6,c1,g1; b6,a6; =;73	113: a1,a3,b1; b3,a6; =;95
28: d8,b3,c7; d6,a6; =;96	71: d6,g1,g5; b6,a6; =;75	114: f1,a2,e1; d2,a6; =;98
29: f8,f7,g7; f6,a6; =;97	72: d6,c1,c6; b5,a6; =;54	115: d8,d5,f8; b8,a5; =;37
30: c7,a7,d6; d5,a6; =;93	73: d6,c7,e5; d4,a6; =;89	116: d8,d5,g7; b8,a5; =;37
31: d7,b3,h3; b7,a6; =;87	74: e6,c1,d7; b5,a6; =;96	117: d8,b3,g5; b8,a5; =;85
32: d7,g3,g5; b7,a6; =;76	75: e6,c7,f5; e4,a6; =;92	118: d8,d3,g5; b8,a5; =;63
33: d7,f2,g5; b7,a6; =;73	76: a5,c7,e8; d8,a6; =;97	119: d8,e2,g5; b8,a5; =;76
34: d7,c1,f8; b7,a6; =;85	77: a5,a7,c8; b7,a6; =;89	120: d8,c1,h7; b8,a5; =;85
35: d7,c1,h2; b7,a6; =;87	78: a5,a7,c6; b7,a6; =;90	121: d8,c1,h5; b8,a5; =;85
36: d7,c1,g1; b7,a6; =;74	79: a5,a7,c5; c7,a6; =;85	122: d8,c1,h3; b8,a5; =;85
37: d7,g1,g5; b7,a6; =;76	80: a5,c7,d5; c6,a6; =;93	123: e8,b3,d4; c8,a5; =;33
38: d7,a2,g5; b6,a6; =;83	81: a5,c4,d6; c5,a6; =;94	124: d7,c1,h2; b8,a5; =;85
39: d7,a2,g3; b6,a6; =;92	82: a5,c5,e6; d5,a6; =;95	125: d7,c1,g1; b8,a5; =;74
40: d7,c1,c6; b6,a6; =;56	83: a5,c5,e4; d4,a6; =;85	126: d7,b3,a5; b7,a5; =;84
41: e7,c1,g1; a7,a6; =;75	84: a5,c4,d2; d3,a6; =;92	127: d7,b3,c1; b7,a5; =;84
42: e7,c1,d8; c7,a6; =;75	85: a5,a2,b4; b2,a6; =;89	128: d7,d3,g5; b7,a5; =;62
43: f7,a7,e8; d7,a6; =;94	86: a5,b1,c3; b2,a6; =;85	129: d7,a2,g5; b7,a5; =;73

130:	d7,a2,h4;	b7,a5;	=;92	204:	d6,c1,d3;	b6,a5;	=;45	278:	f5,a2,f7;	h5,a5;	=;68
131:	d7,a2,g3;	b7,a5;	=;92	205:	d6,c1,f3;	b6,a5;	=;83	279:	f5,a2,g4;	h5,a5;	=;66
132:	d7,a2,h2;	b7,a5;	=;92	206:	d6,c1,h3;	b6,a5;	=;83	280:	f5,e2,g8;	h5,a5;	=;64
133:	d7,a2,g1;	b7,a5;	=;92	207:	d6,c1,e2;	b6,a5;	=;72	281:	f5,e2,f7;	h5,a5;	=;68
134:	d7,e2,g5;	b7,a5;	=;75	208:	d6,c1,d1;	b6,a5;	=;72	282:	f5,e2,g4;	h5,a5;	=;64
135:	d7,c1,h7;	b7,a5;	=;84	209:	e6,a2,c1;	a6,a5;	=;72	283:	f5,d1,g8;	h5,a5;	=;65
136:	d7,c1,e6;	b7,a5;	=;84	210:	e6,c1,e2;	a6,a5;	=;73	284:	f5,d1,f7;	h5,a5;	=;68
137:	d7,c1,h5;	b7,a5;	=;84	211:	e6,c1,d1;	a6,a5;	=;74	285:	f5,d1,g4;	h5,a5;	=;65
138:	d7,c1,f3;	b7,a5;	=;84	212:	f6,a2,a8;	f2,a5;	=;90	286:	f5,a2,d8;	h4,a5;	=;91
139:	d7,c1,h3;	b7,a5;	=;84	213:	f6,a2,c8;	f2,a5;	=;90	287:	f5,a2,h8;	h4,a5;	=;91
140:	d7,c1,e2;	b7,a5;	=;73	214:	f6,a2,b7;	f2,a5;	=;92	288:	f5,a2,h6;	h4,a5;	=;91
141:	d7,a2,e4;	b6,a5;	=;94	215:	g6,d5,e4;	g4,a5;	=;75	289:	f5,a2,g5;	h4,a5;	=;91
142:	e7,c1,e2;	a7,a5;	=;74	216:	g6,d5,e2;	g4,a5;	=;75	290:	f5,a2,f2;	h4,a5;	=;93
143:	e7,a2,d8;	c7,a5;	=;74	217:	g6,b3,d5;	g4,a5;	=;75	291:	f5,a2,h2;	h4,a5;	=;93
144:	f7,a2,a8;	f1,a5;	=;91	218:	h6,d5,e4;	h4,a5;	=;76	292:	f5,a2,a8;	f3,a5;	=;90
145:	f7,a2,c8;	f1,a5;	=;91	219:	h6,d5,e2;	h4,a5;	=;76	293:	f5,a2,c8;	f3,a5;	=;90
146:	f7,a2,b7;	f1,a5;	=;92	220:	h6,b3,d5;	h4,a5;	=;76	294:	f5,a2,b7;	f3,a5;	=;92
147:	c6,d5,h8;	b8,a5;	=;19	221:	h6,d1,d5;	h4,a5;	=;76	295:	f5,a2,d5;	f3,a5;	=;70
148:	c6,e4,h8;	b8,a5;	=;19	222:	b5,a6,g4;	a7,a5;	=;34	296:	f5,a2,d1;	f3,a5;	=;87
149:	c6,b3,h8;	b8,a5;	=;19	223:	b5,c6,f6;	b7,a5;	=;97	297:	f5,d1,d5;	f3,a5;	=;79
150:	c6,d3,h8;	b8,a5;	=;19	224:	c5,a2,g8;	b7,a5;	=;31	298:	g5,d5,h4;	g3,a5;	=;98
151:	c6,e2,h8;	b8,a5;	=;19	225:	c5,d3,f6;	c7,a5;	=;30	299:	g5,b3,d4;	g3,a5;	=;63
152:	c6,d1,h8;	b8,a5;	=;19	226:	c5,b5,b7;	b3,a5;	=;88	300:	g5,c1,e7;	g3,a5;	=;83
153:	c6,a6,f6;	c8,a5;	=;29	227:	d5,a2,e6;	b6,a5;	=;32	301:	g5,d1,d5;	g3,a5;	=;71
154:	c6,b3,b7;	c8,a5;	=;9	228:	d5,a2,e2;	b6,a5;	=;89	302:	h5,d5,h4;	h3,a5;	=;86
155:	c6,b3,f7;	c8,a5;	=;9	229:	d5,e2,e6;	b6,a5;	=;72	303:	h5,e4,h4;	h3,a5;	=;64
156:	c6,b3,f6;	c8,a5;	=;29	230:	d5,c1,d8;	b6,a5;	=;80	304:	h5,b3,d4;	h3,a5;	=;64
157:	c6,d3,f6;	c8,a5;	=;29	231:	d5,c1,f8;	b6,a5;	=;83	305:	h5,e2,h4;	h3,a5;	=;64
158:	c6,e2,f6;	c8,a5;	=;29	232:	d5,c1,g7;	b6,a5;	=;83	306:	h5,d1,h4;	h3,a5;	=;64
159:	c6,d1,f6;	c8,a5;	=;29	233:	d5,c1,g5;	b6,a5;	=;80	307:	a4,a7,b5;	b7,a5;	=;96
160:	d6,c1,h7;	b8,a5;	=;63	234:	d5,c1,f4;	b6,a5;	=;80	308:	a4,a6,c5;	b6,a5;	=;98
161:	d6,a6,d5;	c8,a5;	=;27	235:	d5,b3,g5;	b5,a5;	=;82	309:	a4,a8,e8;	c6,a5;	=;99
162:	d6,a2,g8;	c8,a5;	=;29	236:	d5,b3,c1;	b5,a5;	=;82	310:	a4,a8,e6;	c6,a5;	=;99
163:	d6,c1,f6;	c8,a5;	=;29	237:	d5,d3,f4;	b5,a5;	=;44	311:	a4,a8,c4;	c6,a5;	=;97
164:	d6,a8,c1;	d8,a5;	=;89	238:	d5,a2,b8;	b5,a5;	=;90	312:	a4,a8,b8;	d6,a5;	=;98
165:	d6,a6,f6;	d8,a5;	=;28	239:	d5,a2,h2;	b5,a5;	=;90	313:	a4,a6,b8;	d6,a5;	=;98
166:	d6,a6,c1;	d8,a5;	=;89	240:	d5,a2,g1;	b5,a5;	=;90	314:	a4,g8,h8;	e6,a5;	=;100
167:	d6,d5,f6;	d8,a5;	=;28	241:	d5,c1,d7;	b5,a5;	=;82	315:	a4,a8,b6;	c5,a5;	=;98
168:	d6,e4,f6;	d8,a5;	=;28	242:	d5,c1,h7;	b5,a5;	=;82	316:	a4,b6,c4;	c5,a5;	=;96
169:	d6,b3,c7;	d8,a5;	=;24	243:	d5,c1,c6;	b5,a5;	=;53	317:	a4,c6,e5;	d5,a5;	=;98
170:	d6,b3,g7;	d8,a5;	=;24	244:	d5,c1,e6;	b5,a5;	=;82	318:	a4,h7,h8;	f5,a5;	=;101
171:	d6,b3,f6;	d8,a5;	=;28	245:	d5,c1,h5;	b5,a5;	=;82	319:	a4,h1,h2;	f4,a5;	=;102
172:	d6,d3,f6;	d8,a5;	=;28	246:	d5,c1,d3;	b5,a5;	=;44	320:	a4,c4,e3;	d3,a5;	=;94
173:	d6,a2,f6;	d8,a5;	=;28	247:	d5,c1,f3;	b5,a5;	=;82	321:	a4,g1,h1;	e3,a5;	=;104
174:	d6,e2,f6;	d8,a5;	=;28	248:	d5,c1,h3;	b5,a5;	=;82	322:	a4,a2,c4;	c2,a5;	=;93
175:	d6,c1,d5;	d8,a5;	=;89	249:	d5,b2,c1;	b4,a5;	=;83	323:	a4,a2,e5;	d2,a5;	=;94
176:	d6,d1,f6;	d8,a5;	=;28	250:	d5,c1,d4;	b4,a5;	=;87	324:	a4,a2,b2;	d2,a5;	=;94
177:	d6,c6,e6;	b7,a5;	=;29	251:	d5,d1,e2;	b4,a5;	=;72	325:	a4,a2,g1;	d2,a5;	=;102
178:	d6,c1,f8;	b7,a5;	=;84	252:	d5,c1,f5;	f2,a5;	=;91	326:	c4,c1,e6;	b6,a5;	=;92
179:	d6,c1,g7;	b7,a5;	=;84	253:	e5,a2,d6;	d3,a5;	=;90	327:	c4,a6,f3;	c2,a5;	=;91
180:	d6,c1,g5;	b7,a5;	=;62	254:	e5,a2,b7;	e3,a5;	=;91	328:	c4,c6,f3;	c2,a5;	=;91
181:	d6,a6,c7;	b6,a5;	=;28	255:	e5,a2,f7;	e3,a5;	=;91	329:	d4,a6,g1;	d2,a5;	=;84
182:	d6,b3,g5;	b6,a5;	=;83	256:	e5,a2,c6;	e3,a5;	=;93	330:	d4,a6,f3;	d1,a5;	=;92
183:	d6,b3,c1;	b6,a5;	=;83	257:	e5,a2,e4;	e3,a5;	=;91	331:	d4,c6,f3;	d1,a5;	=;92
184:	d6,d3,g5;	b6,a5;	=;61	258:	e5,a2,b3;	e3,a5;	=;93	332:	e4,b3,f7;	g4,a5;	=;75
185:	d6,d3,f4;	b6,a5;	=;45	259:	f5,a6,g8;	h5,a5;	=;86	333:	e4,a2,d8;	g3,a5;	=;90
186:	d6,a2,b8;	b6,a5;	=;91	260:	f5,a6,f7;	h5,a5;	=;85	334:	e4,a2,g5;	g3,a5;	=;90
187:	d6,a2,d8;	b6,a5;	=;73	261:	f5,a6,g4;	h5,a5;	=;85	335:	e4,a6,f5;	f2,a5;	=;74
188:	d6,a2,g5;	b6,a5;	=;72	262:	f5,c6,g8;	h5,a5;	=;74	336:	e4,c6,f5;	f2,a5;	=;74
189:	d6,a2,h4;	b6,a5;	=;91	263:	f5,c6,f7;	h5,a5;	=;80	337:	e4,d5,f5;	f2,a5;	=;66
190:	d6,a2,g3;	b6,a5;	=;91	264:	f5,c6,g4;	h5,a5;	=;74	338:	e4,b3,f5;	f2,a5;	=;74
191:	d6,a2,f2;	b6,a5;	=;94	265:	f5,d5,g8;	h5,a5;	=;66	339:	f4,c1,g4;	h5,a5;	=;90
192:	d6,a2,h2;	b6,a5;	=;91	266:	f5,d5,f7;	h5,a5;	=;68	340:	f4,a6,f7;	h4,a5;	=;86
193:	d6,a2,c1;	b6,a5;	=;70	267:	f5,d5,g4;	h5,a5;	=;66	341:	f4,a6,g7;	h4,a5;	=;79
194:	d6,a2,g1;	b6,a5;	=;91	268:	f5,e4,g8;	h5,a5;	=;64	342:	f4,a6,g3;	h4,a5;	=;79
195:	d6,e2,g3;	b6,a5;	=;74	269:	f5,e4,f7;	h5,a5;	=;68	343:	f4,c6,f7;	h4,a5;	=;81
196:	d6,c1,e8;	b6,a5;	=;83	270:	f5,e4,g4;	h5,a5;	=;64	344:	f4,c6,g7;	h4,a5;	=;78
197:	d6,c1,f7;	b6,a5;	=;83	271:	f5,b3,g8;	h5,a5;	=;70	345:	f4,c6,g3;	h4,a5;	=;78
198:	d6,c1,h7;	b6,a5;	=;83	272:	f5,b3,f7;	h5,a5;	=;72	346:	f4,d5,f7;	h4,a5;	=;69
199:	d6,c1,c6;	b6,a5;	=;54	273:	f5,b3,g4;	h5,a5;	=;70	347:	f4,d5,g7;	h4,a5;	=;57
200:	d6,c1,e6;	b6,a5;	=;83	274:	f5,d3,g8;	h5,a5;	=;66	348:	f4,d5,g3;	h4,a5;	=;57
201:	d6,c1,f5;	b6,a5;	=;83	275:	f5,d3,f7;	h5,a5;	=;70	349:	f4,e4,f7;	h4,a5;	=;69
202:	d6,c1,h3;	b6,a5;	=;83	276:	f5,d3,g4;	h5,a5;	=;66	350:	f4,e4,g7;	h4,a5;	=;57
203:	d6,c1,e4;	b6,a5;	=;71	277:	f5,a2,g8;	h5,a5;	=;66	351:	f4,e4,g3;	h4,a5;	=;57

352: f4,b3,f7; h4,a5; =;73
353: f4,b3,g7; h4,a5; =;57
354: f4,b3,g3; h4,a5; =;57
355: f4,d3,f7; h4,a5; =;71
356: f4,d3,g7; h4,a5; =;57
357: f4,d3,g3; h4,a5; =;57
358: f4,e2,g7; h4,a5; =;55
359: f4,e2,g3; h4,a5; =;55
360: f4,e2,f7; h4,a5; =;69
361: f4,e2,g7; h4,a5; =;56
362: f4,e2,g3; h4,a5; =;56
363: f4,c1,d8; h4,a5; =;91
364: f4,c1,h8; h4,a5; =;91
365: f4,c1,h6; h4,a5; =;91
366: f4,c1,g5; h4,a5; =;91
367: f4,c1,f2; h4,a5; =;91
368: f4,c1,h2; h4,a5; =;91
369: f4,d1,f7; h4,a5; =;69
370: f4,d1,g7; h4,a5; =;57
371: f4,d1,g3; h4,a5; =;57
372: f4,e6,e2; h3,a5; =;80
373: f4,b3,e2; h3,a5; =;60
374: d3,b1,c3; b2,a5; =;62
375: d3,b1,d2; b2,a5; =;60
376: d3,c1,f5; f2,a5; =;92
377: d3,a6,h2; d1,a5; =;86
378: d3,c6,h2; d1,a5; =;78
379: d3,a6,h3; e1,a5; =;91
380: e3,a6,f7; g3,a5; =;88
381: e3,c6,f7; g3,a5; =;84
382: e3,d5,f7; g3,a5; =;71
383: e3,b3,f7; g3,a5; =;76
384: e3,d3,f7; g3,a5; =;73
385: e3,a2,f7; g3,a5; =;71
386: e3,c1,d8; g3,a5; =;93
387: e3,c1,h8; g3,a5; =;93
388: e3,c1,h6; g3,a5; =;92
389: e3,c1,g5; g3,a5; =;93
390: e3,d1,f7; g3,a5; =;71
391: e3,a6,d8; g2,a5; =;89
392: e3,a6,h8; g2,a5; =;89
393: e3,a6,e2; g2,a5; =;82
394: e3,c6,d8; g2,a5; =;85
395: e3,c6,h8; g2,a5; =;94
396: e3,b3,d8; g2,a5; =;77
397: e3,b3,h8; g2,a5; =;78
398: e3,b3,e2; g2,a5; =;61
399: f3,a6,f7; h3,a5; =;87
400: f3,a6,g2; h3,a5; =;44
401: f3,c6,f7; h3,a5; =;82
402: f3,c6,g2; h3,a5; =;44
403: f3,e4,f7; h3,a5; =;70
404: f3,b3,f7; h3,a5; =;74
405: f3,b3,g2; h3,a5; =;42
406: f3,c1,d8; h3,a5; =;91
407: f3,d1,f7; h3,a5; =;70
408: a2,a1,f5; c1,a5; =;98
409: a2,a1,f1; c1,a5; =;98
410: d2,c1,h5; b2,a5; =;13
411: d2,c1,h3; b2,a5; =;13
412: e2,a6,f7; g2,a5; =;89
413: e2,c6,f7; g2,a5; =;85
414: e2,e4,f7; g2,a5; =;72
415: e2,b3,f7; g2,a5; =;77
416: e2,c1,d8; g2,a5; =;94
417: e2,c1,h8; g2,a5; =;94
418: e2,a6,h8; g1,a5; =;90
419: e2,b3,h8; g1,a5; =;78
420: f2,c1,g2; h3,a5; =;95
421: f2,a2,e1; d2,a5; =;97
422: c1,a1,c2; a2,a5; =; 9
423: e1,a6,f7; g1,a5; =;90
424: e1,c6,f7; g1,a5; =;86
425: e1,e4,f7; g1,a5; =;73

426: e1,b3,f7; g1,a5; =;78
427: e1,c1,d8; g1,a5; =;95
428: e1,c1,h8; g1,a5; =;95
429: d8,b4,d4; b8,a4; =;31
430: d8,c3,f8; b8,a4; =;36
431: d8,c3,g7; b8,a4; =;36
432: d8,c3,g5; b8,a4; =;36
433: d8,c3,d4; b8,a4; =;31
434: d8,e2,e2; b8,a4; =;92
435: d8,c1,g5; b8,a4; =;62
436: d8,c1,d4; b8,a4; =;31
437: e8,b4,d4; c8,a4; =;32
438: e8,c3,d8; c8,a4; =;33
439: e8,c3,d4; c8,a4; =;32
440: e8,c1,d4; c8,a4; =;32
441: d7,b4,c8; b7,a4; =;15
442: d7,b4,d4; b7,a4; =;30
443: d7,c3,f8; b7,a4; =;35
444: d7,c3,g7; b7,a4; =;35
445: d7,c3,g5; b7,a4; =;35
446: d7,c3,d4; b7,a4; =;30
447: d7,e2,e6; b7,a4; =;32
448: d7,e2,e2; b7,a4; =;91
449: d7,c1,c8; b7,a4; =;15
450: d7,c1,g5; b7,a4; =;61
451: d7,c1,d4; b7,a4; =;30
452: e7,c3,d8; c7,a4; =;32
453: f7,a2,b6; f1,a4; =;90
454: f7,a2,d6; f1,a4; =;90
455: f7,a2,a5; f1,a4; =;90
456: f7,a2,b2; f1,a4; =;90
457: a6,c1,f6; a8,a4; =;30
458: b6,b4,f6; b8,a4; =;29
459: b6,c1,f6; b8,a4; =;29
460: c6,a5,c3; b8,a4; =;18
461: c6,a5,c1; b8,a4; =;18
462: c6,b4,h8; b8,a4; =;18
463: c6,c3,h8; b8,a4; =;18
464: c6,c1,h8; b8,a4; =;18
465: c6,b7,c3; c8,a4; =; 8
466: c6,b7,c1; c8,a4; =; 8
467: c6,b4,b7; c8,a4; =; 8
468: c6,b4,f7; c8,a4; =; 8
469: c6,b4,f6; c8,a4; =;28
470: c6,c3,f7; c8,a4; =; 8
471: c6,c3,f6; c8,a4; =;28
472: c6,c1,f7; c8,a4; =; 8
473: c6,c1,f6; c8,a4; =;28
474: d6,a2,h7; b8,a4; =;33
475: d6,a2,f7; c8,a4; =;33
476: d6,a2,f6; c8,a4; =;28
477: d6,a2,c3; c8,a4; =;88
478: d6,b4,c7; d8,a4; =;23
479: d6,b4,g7; d8,a4; =;23
480: d6,b4,f6; d8,a4; =;27
481: d6,c3,c7; d8,a4; =;23
482: d6,c3,g7; d8,a4; =;23
483: d6,c3,f6; d8,a4; =;27
484: d6,c1,c7; d8,a4; =;23
485: d6,c1,g7; d8,a4; =;23
486: d6,c1,f6; d8,a4; =;27
487: d6,a2,f8; b7,a4; =;32
488: d6,a2,g7; b7,a4; =;32
489: d6,a2,g5; b7,a4; =;32
490: d6,a2,d4; b7,a4; =;30
491: d6,b4,c7; b6,a4; =;27
492: d6,b4,d4; b6,a4; =;29
493: d6,c3,d8; b6,a4; =;31
494: d6,c3,f8; b6,a4; =;34
495: d6,c3,g7; b6,a4; =;34
496: d6,c3,g5; b6,a4; =;34
497: d6,c3,d4; b6,a4; =;29
498: d6,a2,e6; b6,a4; =;31
499: d6,a2,f5; b6,a4; =;90

500: d6,a2,e4; b6,a4; =;93
501: d6,a2,f3; b6,a4; =;90
502: d6,a2,e2; b6,a4; =;90
503: d6,a2,d1; b6,a4; =;93
504: d6,c1,c7; b6,a4; =;27
505: d6,c1,g5; b6,a4; =;60
506: d6,c1,d4; b6,a4; =;29
507: d6,c1,f4; b6,a4; =;44
508: d6,c1,c3; b6,a4; =;27
509: e6,a2,d1; a6,a4; =;95
510: e6,c1,c3; a6,a4; =;29
511: f6,a2,b6; f2,a4; =;89
512: f6,a2,d6; f2,a4; =;89
513: f6,a2,a5; f2,a4; =;89
514: f6,a2,b2; f2,a4; =;88
515: f6,a2,d2; f2,a4; =;89
516: g6,b4,d5; g4,a4; =;73
517: g6,c3,d5; g4,a4; =;71
518: g6,c1,d5; g4,a4; =;73
519: g6,a2,d5; h4,a4; =;72
520: h6,b4,d5; h4,a4; =;74
521: h6,c3,d5; h4,a4; =;72
522: h6,c1,d5; h4,a4; =;74
523: a5,b4,f6; a7,a4; =;31
524: a5,c1,f6; a7,a4; =;31
525: b5,a5,c3; a7,a4; =;19
526: b5,a5,c1; a7,a4; =;19
527: b5,b4,f6; b7,a4; =;30
528: b5,c3,f6; b7,a4; =;30
529: b5,c1,f6; b7,a4; =;30
530: c5,a2,f6; b7,a4; =;30
531: c5,a2,c3; b7,a4; =;90
532: c5,b4,f6; c7,a4; =;29
533: c5,c1,f6; c7,a4; =;29
534: d5,b4,e6; b6,a4; =;31
535: d5,c3,e6; b6,a4; =;29
536: d5,a2,d4; b6,a4; =;88
537: d5,a2,c3; b6,a4; =;91
538: d5,c1,e6; b6,a4; =;31
539: d5,a2,a8; b5,a4; =;28
540: d5,a2,d7; b5,a4; =;33
541: d5,a2,e6; b5,a4; =;30
542: d5,a2,f3; b5,a4; =;89
543: d5,a2,e2; b5,a4; =;89
544: d5,a2,d1; b5,a4; =;92
545: d5,c1,g5; b5,a4; =;59
546: d5,c1,f4; b5,a4; =;43
547: d5,c3,e2; b4,a4; =;58
548: d5,c1,e2; b4,a4; =;42
549: d5,c1,d1; b4,a4; =;52
550: d5,a2,d6; d3,a4; =;89
551: d5,a2,a5; d3,a4; =;91
552: f5,b4,g8; h5,a4; =;65
553: f5,b4,f7; h5,a4; =;71
554: f5,b4,g4; h5,a4; =;65
555: f5,c3,g8; h5,a4; =;63
556: f5,c3,f7; h5,a4; =;67
557: f5,c3,g4; h5,a4; =;63
558: f5,c1,g8; h5,a4; =;67
559: f5,c1,f7; h5,a4; =;69
560: f5,c1,g4; h5,a4; =;67
561: f5,a2,f7; h4,a4; =;70
562: f5,a2,g7; h4,a4; =;91
563: f5,b4,d5; f3,a4; =;71
564: f5,c3,d5; f3,a4; =;69
565: f5,c3,g4; f3,a4; =;67
566: f5,a2,b6; f3,a4; =;89
567: f5,a2,d6; f3,a4; =;89
568: f5,a2,a5; f3,a4; =;89
569: f5,a2,b4; f3,a4; =;88
570: f5,a2,b2; f3,a4; =;86
571: f5,c1,d5; f3,a4; =;71
572: f5,c1,g4; f3,a4; =;69
573: f5,a2,e8; g3,a4; =;90

574: f5, a2, d5; g3, a4; =; 70
575: g5, b4, d5; g3, a4; =; 72
576: g5, b4, d4; g3, a4; =; 62
577: g5, c3, d5; g3, a4; =; 70
578: g5, c3, d4; g3, a4; =; 60
579: g5, c3, h4; g3, a4; =; 62
580: g5, c1, d5; g3, a4; =; 72
581: g5, c1, d4; g3, a4; =; 62
582: h5, b4, d5; h3, a4; =; 73
583: h5, b4, d4; h3, a4; =; 63
584: h5, c3, d5; h3, a4; =; 71
585: h5, c3, d4; h3, a4; =; 61
586: h5, c3, h4; h3, a4; =; 63
587: h5, c1, d5; h3, a4; =; 73
588: h5, c1, d4; h3, a4; =; 63
589: e4, b4, f7; g4, a4; =; 74
590: e4, c3, f7; g4, a4; =; 69
591: e4, c1, f7; g4, a4; =; 71
592: e4, a2, f7; g3, a4; =; 71
593: e4, b4, f5; f2, a4; =; 59
594: e4, c3, f5; f2, a4; =; 57
595: e4, a2, d8; f2, a4; =; 72
596: e4, c1, f5; f2, a4; =; 61
597: f4, b4, f7; h4, a4; =; 72
598: f4, b4, g7; h4, a4; =; 56
599: f4, b4, g3; h4, a4; =; 56
600: f4, c3, f7; h4, a4; =; 68
601: f4, c3, g7; h4, a4; =; 54
602: f4, c3, g3; h4, a4; =; 54
603: f4, c1, f7; h4, a4; =; 70
604: f4, c1, g7; h4, a4; =; 56
605: f4, c1, g3; h4, a4; =; 56
606: f4, b4, e2; h3, a4; =; 59
607: f4, c3, e2; h3, a4; =; 57
608: f4, c1, e2; h3, a4; =; 59
609: a3, c3, d5; a5, a4; =; 29
610: c3, a5, f1; b1, a4; =; 7
611: c3, e3, e4; b1, a4; =; 5
612: c3, e3, f3; b1, a4; =; 5
613: c3, e3, f1; b1, a4; =; 5
614: c3, a5, e3; c1, a4; =; 6
615: c3, a5, b2; c1, a4; =; 8
616: c3, a5, f2; c1, a4; =; 8
617: c3, b2, d2; c1, a4; =; 6
618: c3, d2, e3; c1, a4; =; 4
619: c3, d2, f2; c1, a4; =; 6
620: d3, b1, c3; b3, a4; =; 91
621: d3, c3, d2; b2, a4; =; 59
622: d3, c3, e2; b2, a4; =; 24
623: d3, c1, e2; b2, a4; =; 24
624: d3, c1, f5; e1, a4; =; 62
625: e3, b4, f7; g3, a4; =; 75
626: e3, c3, f7; g3, a4; =; 70
627: e3, c1, f7; g3, a4; =; 72
628: e3, c1, e2; c2, a4; =; 52
629: e3, b4, h8; g2, a4; =; 76
630: e3, b4, e2; g2, a4; =; 60
631: e3, c3, e2; g2, a4; =; 58
632: e3, c1, h8; g2, a4; =; 73
633: e3, c1, e2; g2, a4; =; 60
634: f3, b4, f7; h3, a4; =; 73
635: f3, b4, g2; h3, a4; =; 43
636: f3, c3, f7; h3, a4; =; 69
637: f3, c3, g2; h3, a4; =; 41
638: f3, c1, f7; h3, a4; =; 71
639: f3, c1, g2; h3, a4; =; 41
640: a2, c5, e3; c1, a4; =; 98
641: a2, a1, e3; c1, a4; =; 97
642: d2, a6, c1; a3, a4; =; 8
643: d2, c1, d5; a3, a4; =; 9
644: d2, c1, f4; b2, a4; =; 10
645: d2, c1, e1; b2, a4; =; 10
646: d2, c1, f1; b1, a4; =; 25
647: e2, b4, f7; g2, a4; =; 76

648: e2, c3, f7; g2, a4; =; 71
649: e2, c1, f7; g2, a4; =; 73
650: a1, a3, b1; b3, a4; =; 92
651: e1, b4, f7; g1, a4; =; 77
652: e1, c3, f7; g1, a4; =; 72
653: e1, c1, f7; g1, a4; =; 74
654: f1, a2, e1; d2, a4; =; 96
655: d8, a2, f8; b8, a3; =; 35
656: d8, a2, g7; b8, a3; =; 35
657: d8, a2, g5; b8, a3; =; 35
658: d8, a2, d4; b8, a3; =; 30
659: e8, a2, d8; c8, a3; =; 32
660: e8, a2, d4; c8, a3; =; 31
661: d7, a2, c8; b7, a3; =; 14
662: d7, a2, f8; b7, a3; =; 34
663: d7, a2, g7; b7, a3; =; 34
664: d7, a2, g5; b7, a3; =; 34
665: d7, a2, c4; b7, a3; =; 13
666: d7, a2, d4; b7, a3; =; 29
667: e7, a2, d8; c7, a3; =; 31
668: e7, a2, d4; c7, a3; =; 30
669: f7, a2, c4; f1, a3; =; 69
670: a6, a2, f6; a8, a3; =; 29
671: b6, a2, f6; b8, a3; =; 28
672: c6, a2, h8; b8, a3; =; 17
673: c6, a2, a5; b8, a3; =; 17
674: c6, a2, b7; c8, a3; =; 7
675: c6, a2, f7; c8, a3; =; 7
676: c6, a2, f6; c8, a3; =; 27
677: d6, a2, c7; d8, a3; =; 22
678: d6, a2, g7; d8, a3; =; 22
679: d6, a2, f6; d8, a3; =; 26
680: d6, a2, d8; b6, a3; =; 30
681: d6, a2, f8; b6, a3; =; 33
682: d6, a2, c7; b6, a3; =; 26
683: d6, a2, g7; b6, a3; =; 33
684: d6, a2, g5; b6, a3; =; 33
685: d6, a2, d4; b6, a3; =; 28
686: d6, a2, f4; b6, a3; =; 30
687: d6, a2, c3; b6, a3; =; 26
688: f6, a2, c4; f2, a3; =; 67
689: g6, a2, d5; g4, a3; =; 69
690: h6, a2, d5; h4, a3; =; 70
691: a5, a2, f6; a7, a3; =; 30
692: b5, a2, a5; a7, a3; =; 18
693: b5, a2, f6; b7, a3; =; 29
694: c5, a2, f6; c7, a3; =; 28
695: d5, a2, e6; b6, a3; =; 28
696: d5, a2, d8; b5, a3; =; 29
697: d5, a2, f8; b5, a3; =; 32
698: d5, a2, g7; b5, a3; =; 32
699: d5, a2, g5; b5, a3; =; 32
700: d5, a2, f4; b5, a3; =; 29
701: d5, a2, c4; d3, a3; =; 52
702: f5, a2, g8; h5, a3; =; 59
703: f5, a2, f7; h5, a3; =; 63
704: f5, a2, g4; h5, a3; =; 59
705: f5, a2, d5; f3, a3; =; 67
706: f5, a2, c4; f3, a3; =; 65
707: f5, a2, g4; f3, a3; =; 65
708: g5, a2, d5; g3, a3; =; 68
709: g5, a2, d4; g3, a3; =; 57
710: g5, a2, h4; g3, a3; =; 61
711: h5, a2, d5; h3, a3; =; 69
712: h5, a2, d4; h3, a3; =; 58
713: h5, a2, h4; h3, a3; =; 62
714: c4, a2, b8; a4, a3; =; 9
715: d4, a2, c4; c2, a3; =; 28
716: e4, a2, f7; g4, a3; =; 66
717: e4, a2, f5; f2, a3; =; 56
718: f4, a2, f7; h4, a3; =; 64
719: f4, a2, g7; h4, a3; =; 50
720: f4, a2, g3; h4, a3; =; 50
721: f4, a2, e2; h3, a3; =; 53

722: c3, a5, c2; a2, a3; =; 3
723: c3, c2, c5; a2, a3; =; 3
724: c3, c2, d4; a2, a3; =; 3
725: c3, a1, c2; a2, a3; =; 3
726: c3, b3, b5; b1, a3; =; 4
727: c3, b3, c2; b1, a3; =; 2
728: e3, a2, f7; g3, a3; =; 67
729: e3, a2, e2; a2, a3; =; 54
730: f3, a2, f7; h3, a3; =; 65
731: f3, a2, g2; h3, a3; =; 40
732: c2, a1, b7; a2, a3; =; 0
733: c2, a1, d7; a2, a3; =; 0
734: c2, a1, e6; a2, a3; =; 0
735: c2, a1, b5; a2, a3; =; 0
736: c2, a1, f5; a2, a3; =; 0
737: c2, a1, a4; a2, a3; =; 0
738: c2, a1, c4; a2, a3; =; 0
739: c2, a1, e4; a2, a3; =; 0
740: c2, a1, f3; a2, a3; =; 0
741: c2, a1, e2; a2, a3; =; 0
742: c2, a1, b1; a2, a3; =; 0
743: c2, a1, f1; a2, a3; =; 0
744: e2, a2, f7; g2, a3; =; 68
745: f2, a2, e1; d2, a3; =; 26
746: f2, a2, g1; h2, a3; =; 38
747: c1, a1, d2; a2, a3; =; 0
748: d1, a2, d2; b2, a3; =; 1
749: e1, a2, f7; g1, a3; =; 69
750: f1, a2, g1; h1, a3; =; 39
751: b8, a5, f6; d8, b7; =; 69
752: b8, b4, f6; d8, b7; =; 70
753: a7, b8, c3; a5, b7; =; 73
754: a7, c3, d8; a5, b7; =; 72
755: a7, c3, e7; a5, b7; =; 71
756: a7, c3, e5; a5, b7; =; 70
757: c7, b2, d6; a6, b7; =; 65
758: e7, d7, f5; c8, b7; =; 49
759: e7, d7, f3; c8, b7; =; 49
760: e7, d7, e2; c8, b7; =; 49
761: e7, d4, d7; c7, b7; =; 48
762: b6, a8, c7; b8, b7; =; 59
763: b6, b8, d7; c8, b7; =; 68
764: b6, b8, f8; d8, b7; =; 69
765: b6, b8, d6; d8, b7; =; 69
766: b6, b8, f6; d8, b7; =; 69
767: b6, a7, b8; d8, b7; =; 71
768: b6, b8, c8; e8, b7; =; 70
769: b6, b8, g8; e8, b7; =; 72
770: b6, b8, d5; e8, b7; =; 70
771: b6, b8, f5; e8, b7; =; 70
772: b6, c8, d6; d7, b7; =; 62
773: b6, a7, c8; d7, b7; =; 62
774: b6, g8, h8; e6, b7; =; 70
775: b6, c8, d8; f6, b7; =; 68
776: b6, c4, d6; d5, b7; =; 64
777: b6, h7, h8; f5, b7; =; 70
778: b6, b4, d5; c4, b7; =; 68
779: b6, a1, a2; c4, b7; =; 68
780: b6, h1, h2; f4, b7; =; 70
781: b6, a1, e1; c3, b7; =; 73
782: b6, a1, b1; d3, b7; =; 68
783: b6, g1, h1; e3, b7; =; 70
784: e6, a5, d4; c7, b7; =; 52
785: e6, c5, d4; c7, b7; =; 52
786: a5, b8, d7; a8, b7; =; 10
787: b5, b8, d7; a7, b7; =; 9
788: d5, c2, c4; a6, b7; =; 64
789: a4, b4, f6; b6, b7; =; 66
790: b4, b8, e6; b6, b7; =; 23
791: f3, a5, f5; h2, b7; =; 11
792: e2, a5, f5; g1, b7; =; 13
793: b8, a7, b3; a6, b6; =; 11
794: e8, a6, f4; g8, b6; =; 13
795: e8, d3, f4; g8, b6; =; 13

796: e8, a2, f4; g8, b6; =; 13
797: f8, a6, f4; h8, b6; =; 12
798: f8, a2, f4; h8, b6; =; 12
799: d7, b4, f5; f8, b6; =; 48
800: e7, e2, f3; c8, b6; =; 47
801: e7, b4, f4; g8, b6; =; 13
802: e7, a6, f4; g7, b6; =; 12
803: e7, d3, f4; g7, b6; =; 12
804: e7, a2, f4; g7, b6; =; 12
805: f7, a6, f4; h7, b6; =; 11
806: f7, a2, f4; h7, b6; =; 11
807: a6, b5, b8; d5, b6; =; 54
808: a6, b7, c2; a4, b6; =; 55
809: a6, c2, d7; a4, b6; =; 55
810: a6, c2, e6; a4, b6; =; 54
811: a6, c2, e4; a4, b6; =; 53
812: c6, d5, h1; b8, b6; =; 22
813: c6, d3, h1; b8, b6; =; 22
814: c6, a2, d1; b8, b6; =; 19
815: c6, a2, h1; b8, b6; =; 22
816: c6, c2, d1; b8, b6; =; 19
817: c6, c2, h1; b8, b6; =; 22
818: c6, d1, d5; b8, b6; =; 18
819: c6, d1, d3; b8, b6; =; 19
820: c6, d7, f6; c8, b6; =; 17
821: c6, a6, f6; c8, b6; =; 13
822: c6, a6, h4; c8, b6; =; 21
823: c6, a6, e3; c8, b6; =; 17
824: c6, a6, g3; c8, b6; =; 21
825: c6, d5, f6; c8, b6; =; 13
826: c6, d5, h4; c8, b6; =; 21
827: c6, d5, e3; c8, b6; =; 17
828: c6, d5, g3; c8, b6; =; 21
829: c6, a4, f6; c8, b6; =; 33
830: c6, b4, g6; c8, b6; =; 19
831: c6, d3, f6; c8, b6; =; 13
832: c6, d3, h4; c8, b6; =; 21
833: c6, d3, e3; c8, b6; =; 18
834: c6, d3, g3; c8, b6; =; 21
835: c6, f3, f6; c8, b6; =; 19
836: c6, a2, f6; c8, b6; =; 13
837: c6, a2, h4; c8, b6; =; 21
838: c6, a2, e3; c8, b6; =; 18
839: c6, a2, g3; c8, b6; =; 21
840: c6, c2, f6; c8, b6; =; 13
841: c6, c2, h4; c8, b6; =; 21
842: c6, c2, e3; c8, b6; =; 18
843: c6, c2, g3; c8, b6; =; 21
844: c6, e2, f6; c8, b6; =; 19
845: c6, b1, f6; c8, b6; =; 19
846: c6, f1, f6; c8, b6; =; 19
847: c6, d3, d5; a5, b6; =; 50
848: d6, a8, d7; c8, b6; =; 16
849: d6, a8, c6; c8, b6; =; 15
850: d6, a8, f5; c8, b6; =; 17
851: d6, a8, c4; c8, b6; =; 17
852: d6, a8, e4; c8, b6; =; 17
853: d6, a8, d3; c8, b6; =; 15
854: d6, a8, f3; c8, b6; =; 17
855: d6, a8, c2; c8, b6; =; 17
856: d6, a8, e2; c8, b6; =; 17
857: d6, a8, b1; c8, b6; =; 17
858: d6, a8, f1; c8, b6; =; 17
859: d6, e8, f1; c8, b6; =; 17
860: d6, d7, e8; c8, b6; =; 16
861: d6, d7, f5; c8, b6; =; 51
862: d6, d7, e4; c8, b6; =; 50
863: d6, d7, f3; c8, b6; =; 51
864: d6, d7, e2; c8, b6; =; 50
865: d6, a6, a8; c8, b6; =; 15
866: d6, a6, e8; c8, b6; =; 15
867: d6, a6, g4; c8, b6; =; 15
868: d6, e6, h5; c8, b6; =; 51
869: d6, e6, g4; c8, b6; =; 51

870: d6, d5, g4; c8, b6; =; 15
871: d6, f5, h5; c8, b6; =; 51
872: d6, f5, g4; c8, b6; =; 51
873: d6, a4, a8; c8, b6; =; 31
874: d6, a4, e8; c8, b6; =; 31
875: d6, a4, d7; c8, b6; =; 50
876: d6, a4, a6; c8, b6; =; 31
877: d6, a4, f5; c8, b6; =; 31
878: d6, a4, e4; c8, b6; =; 51
879: d6, c4, f5; c8, b6; =; 26
880: d6, c4, e4; c8, b6; =; 51
881: d6, e4, e8; c8, b6; =; 17
882: d6, e4, f1; c8, b6; =; 51
883: d6, b3, g8; c8, b6; =; 17
884: d6, b3, g4; c8, b6; =; 17
885: d6, d3, e8; c8, b6; =; 15
886: d6, d3, g8; c8, b6; =; 15
887: d6, d3, g6; c8, b6; =; 18
888: d6, d3, g4; c8, b6; =; 15
889: d6, f3, h5; c8, b6; =; 51
890: d6, f3, g4; c8, b6; =; 51
891: d6, a2, a8; c8, b6; =; 17
892: d6, a2, e8; c8, b6; =; 17
893: d6, a2, g8; c8, b6; =; 15
894: d6, a2, g6; c8, b6; =; 18
895: d6, a2, g4; c8, b6; =; 15
896: d6, c2, g8; c8, b6; =; 15
897: d6, c2, g6; c8, b6; =; 18
898: d6, c2, h5; c8, b6; =; 51
899: d6, c2, g4; c8, b6; =; 15
900: d6, d2, f6; c8, b6; =; 17
901: d6, d2, e3; c8, b6; =; 50
902: d6, e2, h5; c8, b6; =; 51
903: d6, e2, g4; c8, b6; =; 51
904: d6, a1, f6; c8, b6; =; 17
905: d6, a1, h4; c8, b6; =; 21
906: d6, a1, e3; c8, b6; =; 18
907: d6, a1, g3; c8, b6; =; 21
908: d6, b1, e8; c8, b6; =; 17
909: d6, b1, d7; c8, b6; =; 50
910: d6, b1, f5; c8, b6; =; 29
911: d6, b1, e4; c8, b6; =; 51
912: d6, c1, f6; c8, b6; =; 17
913: d6, c1, h4; c8, b6; =; 21
914: d6, c1, e3; c8, b6; =; 18
915: d6, c1, g3; c8, b6; =; 21
916: d6, f1, f5; c8, b6; =; 51
917: d6, a8, b4; d8, b6; =; 29
918: d6, a8, d2; d8, b6; =; 49
919: d6, a8, c1; d8, b6; =; 43
920: d6, d7, f6; d8, b6; =; 16
921: d6, a6, f6; d8, b6; =; 12
922: d6, a6, h6; d8, b6; =; 20
923: d6, a6, h4; d8, b6; =; 20
924: d6, a6, e3; d8, b6; =; 16
925: d6, a6, g3; d8, b6; =; 20
926: d6, a6, d2; d8, b6; =; 49
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928: d6, d5, f6; d8, b6; =; 12
929: d6, d5, h6; d8, b6; =; 20
930: d6, d5, h4; d8, b6; =; 20
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932: d6, d5, g3; d8, b6; =; 20
933: d6, f5, f6; d8, b6; =; 18
934: d6, a4, f6; d8, b6; =; 32
935: d6, b4, g6; d8, b6; =; 18
936: d6, b4, f5; d8, b6; =; 17
937: d6, b4, c4; d8, b6; =; 23
938: d6, b4, e4; d8, b6; =; 23
939: d6, b4, f3; d8, b6; =; 23
940: d6, b4, c2; d8, b6; =; 23
941: d6, b4, e2; d8, b6; =; 23
942: d6, c4, f6; d8, b6; =; 18
943: d6, e4, f6; d8, b6; =; 16

944: d6, b3, f6; d8, b6; =; 16
945: d6, b3, b4; d8, b6; =; 23
946: d6, d3, e7; d8, b6; =; 17
947: d6, d3, f6; d8, b6; =; 12
948: d6, d3, h6; d8, b6; =; 20
949: d6, d3, h4; d8, b6; =; 20
950: d6, d3, e3; d8, b6; =; 17
951: d6, d3, g3; d8, b6; =; 20
952: d6, f3, f6; d8, b6; =; 18
953: d6, a2, e7; d8, b6; =; 17
954: d6, a2, f6; d8, b6; =; 12
955: d6, a2, h6; d8, b6; =; 20
956: d6, a2, h4; d8, b6; =; 20
957: d6, a2, e3; d8, b6; =; 17
958: d6, a2, g3; d8, b6; =; 20
959: d6, c2, e7; d8, b6; =; 17
960: d6, c2, f6; d8, b6; =; 12
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962: d6, c2, h4; d8, b6; =; 20
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964: d6, c2, g3; d8, b6; =; 20
965: d6, d2, d5; d8, b6; =; 49
966: d6, e2, f6; d8, b6; =; 18
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969: d6, a1, d5; d8, b6; =; 48
970: d6, b1, f6; d8, b6; =; 18
971: d6, c1, d5; d8, b6; =; 43
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974: d6, b1, c6; b5, b6; =; 50
975: e6, b3, d2; c8, b6; =; 47
976: e6, b3, c1; c8, b6; =; 20
977: e6, a1, f5; c8, b6; =; 25
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979: e6, a1, f3; c8, b6; =; 25
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1005: e6, b4, f4; d8, b6; =; 18
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1007: e6, b4, e3; d8, b6; =; 16
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1013: e6, b4, e1; d8, b6; =; 23
1014: e6, b4, g1; d8, b6; =; 23
1015: e6, b3, d5; d8, b6; =; 18
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1017: e6, b3, d3; d8, b6; =; 18

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1119: f6, c8, d5; g8, b6; =; 17
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1134: g6, b4, b7; g8, b6; =; 22
1135: g6, b4, f7; g8, b6; =; 22
1136: g6, b4, c4; g8, b6; =; 22
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1149: h6, b4, c4; h8, b6; =; 23
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1188: g5, b4, b7; g7, b6; =; 48
1189: g5, b4, c4; g7, b6; =; 48
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1194: g5, b4, f2; h7, b6; =; 49
1195: g5, d3, g4; h7, b6; =; 22
1196: g5, a2, g4; h7, b6; =; 22
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1198: h5, b4, b7; h7, b6; =; 49
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1202: b4, c8, e6; a6, b6; =; 50
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1204: b4, c8, d3; a6, b6; =; 49
1205: b4, c6, e8; a6, b6; =; 45
1206: b4, a4, c8; a6, b6; =; 48
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1211: f4, c2, g7; h4, b6; =; 15
1212: f4, c2, g3; h4, b6; =; 15
1213: f4, d2, f6; h2, b6; =; 22
1214: f4, b1, e4; h2, b6; =; 22
1215: g4, b7, d2; h2, b6; =; 47
1216: g4, a4, d2; h2, b6; =; 47
1217: g4, a2, d2; h2, b6; =; 47
1218: g4, c1, h7; h2, b6; =; 22
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1223: h4, b3, e4; h2, b6; =; 22
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1282: f3, b2, b7; h2, b6; =; 42
1283: f3, a1, c6; h2, b6; =; 44
1284: f3, a1, c4; h2, b6; =; 44
1285: f3, a1, b3; h2, b6; =; 44
1286: f3, a1, c2; h2, b6; =; 44
1287: f3, a4, e6; f1, b6; =; 45
1288: f3, a4, c5; f1, b6; =; 39
1289: f3, a4, f5; f1, b6; =; 46
1290: f3, a4, e2; f1, b6; =; 45
1291: f3, c4, e2; f1, b6; =; 47
1292: f3, a4, f8; g1, b6; =; 46
1293: f3, a4, g5; g1, b6; =; 25
1294: g3, a4, e6; g1, b6; =; 46
1295: e2, a4, g7; g1, b6; =; 24
1296: e2, a4, h6; g1, b6; =; 24
1297: e2, b3, h6; g1, b6; =; 13
1298: e2, b2, e8; g1, b6; =; 47
1299: e2, b2, b7; g1, b6; =; 47
1300: e2, a1, c6; g1, b6; =; 49
1301: e2, a1, c4; g1, b6; =; 49
1302: e2, a1, b3; g1, b6; =; 49
1303: e2, a1, c2; g1, b6; =; 49
1304: d1, c3, f4; f1, b6; =; 17
1305: e1, a8, f5; g1, b6; =; 24
1306: e1, c8, f5; g1, b6; =; 24
1307: e1, e8, f5; g1, b6; =; 24
1308: e1, b7, f5; g1, b6; =; 14
1309: e1, d7, f5; g1, b6; =; 14
1310: e1, e5, e7; g1, b6; =; 24
1311: e1, e5, g7; g1, b6; =; 24
1312: e1, e5, h6; g1, b6; =; 24
1313: e1, f5, g4; g1, b6; =; 24

1314: e1, a4, f5; g1, b6; =; 14
1315: e1, c4, f5; g1, b6; =; 13
1316: e1, b3, f5; g1, b6; =; 13
1317: e1, b1, f5; g1, b6; =; 13
1318: e1, f1, f5; g1, b6; =; 13
1319: f1, a8, g5; h1, b6; =; 18
1320: f1, a8, g1; h1, b6; =; 18
1321: c8, b4, b7; b6, b5; =; 5
1322: d8, a5, d1; b8, b5; =; 15
1323: d8, c5, d1; b8, b5; =; 15
1324: d8, b3, h8; b8, b5; =; 10
1325: e8, b4, f4; g8, b5; =; 12
1326: f8, b4, f4; h8, b5; =; 11
1327: d7, b2, d2; b8, b5; =; 12
1328: d7, b2, c1; b8, b5; =; 12
1329: d7, d2, f2; b8, b5; =; 10
1330: d7, a1, b2; b8, b5; =; 12
1331: d7, a1, f2; b8, b5; =; 10
1332: d7, c1, f2; b8, b5; =; 10
1333: d7, b3, h8; b7, b5; =; 9
1334: d7, b3, f2; b7, b5; =; 9
1335: d7, b2, b3; b7, b5; =; 11
1336: d7, b3, f7; b6, b5; =; 8
1337: d7, b3, e4; b6, b5; =; 8
1338: d7, b3, d1; b6, b5; =; 10
1339: e7, a5, f3; c8, b5; =; 17
1340: e7, a5, e2; c8, b5; =; 17
1341: e7, c5, f3; c8, b5; =; 15
1342: e7, c5, e2; c8, b5; =; 15
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1344: e7, d4, e2; c8, b5; =; 17
1345: e7, a3, b3; c8, b5; =; 17
1346: e7, b3, d2; c8, b5; =; 17
1347: e7, b3, c1; c8, b5; =; 17
1348: e7, b3, e1; c8, b5; =; 17
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1354: e7, c1, f3; c8, b5; =; 17
1355: e7, c1, e2; c8, b5; =; 17
1356: e7, a5, d4; c7, b5; =; 16
1357: e7, c5, d4; c7, b5; =; 14
1358: e7, d2, d4; c7, b5; =; 16
1359: e7, a1, d4; c7, b5; =; 16
1360: e7, c1, d4; c7, b5; =; 16
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1367: b6, c5, f6; b8, b5; =; 17
1368: b6, b4, f6; b8, b5; =; 12
1369: b6, b4, h4; b8, b5; =; 21
1370: b6, b4, e3; b8, b5; =; 17
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1372: b6, d4, f6; b8, b5; =; 19
1373: b6, d2, f6; b8, b5; =; 19
1374: b6, a1, f6; b8, b5; =; 19
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1376: c6, b4, d1; b8, b5; =; 17
1377: c6, b4, h1; b8, b5; =; 21
1378: c6, b7, c5; c8, b5; =; 7
1379: c6, b7, d2; c8, b5; =; 9
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1381: c6, b7, c1; c8, b5; =; 9
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1384: c6, c5, f6; c8, b5; =; 16
1385: c6, b4, b7; c8, b5; =; 5
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1387: c6, b4, h4; c8, b5; =; 20

1388: c6, b4, e3; c8, b5; =; 16
1389: c6, b4, g3; c8, b5; =; 20
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1391: c6, d2, f6; c8, b5; =; 18
1392: c6, a1, b7; c8, b5; =; 9
1393: c6, a1, f6; c8, b5; =; 18
1394: c6, c1, f6; c8, b5; =; 18
1395: c6, b7, e3; a6, b5; =; 12
1396: c6, b6, c3; a5, b5; =; 24
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1408: d6, a5, h5; c8, b5; =; 14
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1461: d6, c1, c7; d8, b5; =; 15

1462: d6, c1, g7; d8, b5; =; 15
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 1489: f6, b4, d4; f8, b5; =; 17
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 1493: f6, b4, g4; g8, b5; =; 16
 1494: f6, b4, g7; h6, b5; =; 7
 1495: f6, b4, f4; h6, b5; =; 9
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 1505: h6, b4, e3; h8, b5; =; 17
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 1510: c5, b4, g4; b7, b5; =; 15
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 1526: c5, c1, g4; b7, b5; =; 20
 1527: c5, a5, f6; c7, b5; =; 17
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 1530: c5, d2, f6; c7, b5; =; 19
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 1532: c5, c1, f6; c7, b5; =; 19
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 1536: c5, c1, e2; a6, b5; =; 21
 1537: f5, b4, e6; h6, b5; =; 16
 1538: g5, b4, d6; g7, b5; =; 11
 1539: g5, b4, h6; g7, b5; =; 20
 1540: g5, b4, g4; h7, b5; =; 21
 1541: h5, b4, d6; h7, b5; =; 12
 1542: b4, d6, e6; b8, b5; =; 6
 1543: b4, d5, d6; b8, b5; =; 6
 1544: b4, c5, d7; a7, b5; =; 21
 1545: b4, d6, d7; a6, b5; =; 6
 1546: b4, a5, e8; a6, b5; =; 22
 1547: b4, a5, d5; a6, b5; =; 16
 1548: b4, d5, d6; a6, b5; =; 6
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 1553: f4, d2, e4; h2, b5; =; 19
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 1555: g4, c5, d3; g2, b5; =; 11
 1556: g4, d3, e5; g2, b5; =; 19
 1557: g4, d3, g5; g2, b5; =; 20
 1558: g4, b2, h3; g2, b5; =; 19
 1559: g4, d2, e4; g2, b5; =; 16
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 1574: h4, d3, g5; h2, b5; =; 21
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 1576: h4, d2, e4; h2, b5; =; 17
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 1609: e3, b2, h5; e1, b5; =; 17
 1610: e3, b2, h3; e1, b5; =; 17
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 1635: f3, a1, d4; h2, b5; =; 11
 1636: f3, a1, h4; h2, b5; =; 9
 1637: f3, a1, f2; h2, b5; =; 9
 1638: f3, a1, e1; h2, b5; =; 9
 1639: f3, c1, f2; h2, b5; =; 9
 1640: f3, d3, d8; f1, b5; =; 18
 1641: f3, d3, f8; f1, b5; =; 18
 1642: f3, d3, h8; f1, b5; =; 18
 1643: f3, b2, e6; f1, b5; =; 18
 1644: f3, b2, g6; f1, b5; =; 18
 1645: f3, b2, h5; f1, b5; =; 18
 1646: f3, b2, h3; f1, b5; =; 18
 1647: f3, b2, e2; f1, b5; =; 18
 1648: f3, c5, g5; g1, b5; =; 19
 1649: f3, b4, d8; g1, b5; =; 19
 1650: f3, b4, f8; g1, b5; =; 19
 1651: f3, b4, h8; g1, b5; =; 19
 1652: f3, d3, f7; g1, b5; =; 19
 1653: f3, d3, h7; g1, b5; =; 19
 1654: f3, b2, f8; g1, b5; =; 19
 1655: f3, b2, h8; g1, b5; =; 19
 1656: f3, b2, g5; g1, b5; =; 19
 1657: f3, a1, b3; g1, b5; =; 12
 1658: f3, c1, g5; g1, b5; =; 19
 1659: f3, b2, b7; h1, b5; =; 22
 1660: g3, d3, d8; g1, b5; =; 19
 1661: g3, d3, f8; g1, b5; =; 19
 1662: g3, d3, h8; g1, b5; =; 19
 1663: g3, b2, e6; g1, b5; =; 19
 1664: g3, b2, g6; g1, b5; =; 19
 1665: g3, b2, h5; g1, b5; =; 19
 1666: g3, b4, d8; h1, b5; =; 20
 1667: g3, a3, b1; h1, b5; =; 7
 1668: h3, d3, d8; h1, b5; =; 20
 1669: h3, d3, f8; h1, b5; =; 20
 1670: h3, d3, h8; h1, b5; =; 20
 1671: h3, b2, e6; h1, b5; =; 20
 1672: h3, b2, g6; h1, b5; =; 20
 1673: h3, b2, h5; h1, b5; =; 20
 1674: d2, d3, f4; f1, b5; =; 16
 1675: d2, d1, f4; f1, b5; =; 18
 1676: e2, d6, f5; g2, b5; =; 22
 1677: e2, a5, f5; g2, b5; =; 12
 1678: e2, a3, f5; g2, b5; =; 22
 1679: e2, d2, f5; g2, b5; =; 11
 1680: e2, a1, f5; g2, b5; =; 12
 1681: e2, a5, d4; g1, b5; =; 13
 1682: e2, a5, h4; g1, b5; =; 11
 1683: e2, a5, e1; g1, b5; =; 11

1684: e2, b3, f5; g1, b5; =; 12
1685: e2, b2, g7; g1, b5; =; 23
1686: e2, b2, d6; g1, b5; =; 23
1687: e2, b2, h6; g1, b5; =; 23
1688: e2, a1, d4; g1, b5; =; 13
1689: e2, a1, h4; g1, b5; =; 11
1690: e2, a1, e1; g1, b5; =; 11
1691: f2, a5, f5; h2, b5; =; 11
1692: f2, a3, f5; h2, b5; =; 21
1693: f2, a1, f5; h2, b5; =; 11
1694: e1, b6, f5; g1, b5; =; 23
1695: e1, d6, f5; g1, b5; =; 23
1696: e1, a5, f5; g1, b5; =; 13
1697: e1, c5, f5; g1, b5; =; 13
1698: e1, e5, f5; g1, b5; =; 23
1699: e1, d4, f5; g1, b5; =; 12
1700: e1, a3, f5; g1, b5; =; 23
1701: e1, c3, f5; g1, b5; =; 23
1702: e1, e3, f5; g1, b5; =; 23
1703: e1, b2, f5; g1, b5; =; 23
1704: e1, d2, f5; g1, b5; =; 12
1705: e1, a1, f5; g1, b5; =; 13
1706: e1, c1, f5; g1, b5; =; 13
1707: f1, b6, a5; h1, b5; =; 17
1708: f1, b6, g1; h1, b5; =; 17
1709: f1, a5, f5; h1, b5; =; 12
1710: f1, a3, f5; h1, b5; =; 22
1711: f1, a3, g5; h1, b5; =; 17
1712: f1, a3, g1; h1, b5; =; 17
1713: f1, a1, f5; h1, b5; =; 12
1714: c8, a2, c6; a8, b4; =; 2
1715: d8, b3, d1; b8, b4; =; 14
1716: c7, a4, b1; a8, b4; =; 11
1717: c7, a4, d1; a8, b4; =; 11
1718: c7, a2, c8; a8, b4; =; 2
1719: c7, a2, d7; a8, b4; =; 13
1720: c7, a2, a4; a8, b4; =; 13
1721: c7, b1, d7; a8, b4; =; 11
1722: c7, d1, d7; a8, b4; =; 11
1723: c7, b6, d1; a7, b4; =; 12
1724: c7, a2, b8; a7, b4; =; 14
1725: c7, b1, b8; a7, b4; =; 12
1726: c7, b3, b6; b5, b4; =; 8
1727: d7, b3, f2; b8, b4; =; 9
1728: d7, a4, b3; b7, b4; =; 9
1729: d7, b3, f7; b7, b4; =; 8
1730: d7, b3, e4; b7, b4; =; 8
1731: d7, b3, d3; b7, b4; =; 10
1732: d7, b3, d1; b7, b4; =; 13
1733: d7, b3, d6; b6, b4; =; 7
1734: d7, b2, b3; b6, b4; =; 9
1735: e7, b3, f3; c8, b4; =; 13
1736: e7, b3, c2; c8, b4; =; 13
1737: e7, b3, e2; c8, b4; =; 13
1738: e7, b3, d4; c7, b4; =; 12
1739: a6, b3, f6; a8, b4; =; 17
1740: a6, a2, d7; a8, b4; =; 2
1741: a6, a2, c6; a8, b4; =; 2
1742: b6, b3, f6; b8, b4; =; 16
1743: c6, b3, b7; c8, b4; =; 6
1744: c6, b3, f6; c8, b4; =; 15
1745: d6, a8, b3; c8, b4; =; 13
1746: d6, a6, b3; c8, b4; =; 13
1747: d6, b3, d7; c8, b4; =; 15
1748: d6, b3, h5; c8, b4; =; 13
1749: d6, b3, e4; c8, b4; =; 15
1750: d6, b3, g4; c8, b4; =; 15
1751: d6, b3, c7; d8, b4; =; 12
1752: d6, b3, g7; d8, b4; =; 12
1753: d6, b3, f6; d8, b4; =; 14
1754: d6, b3, f2; b7, b4; =; 16
1755: d6, b3, d3; b6, b4; =; 11
1756: d6, b3, d1; b6, b4; =; 14
1757: a5, b3, f6; a7, b4; =; 18

1758: b5, b3, f6; b7, b4; =; 17
1759: c5, b3, d7; b7, b4; =; 17
1760: c5, b3, h5; b7, b4; =; 17
1761: c5, b3, e4; b7, b4; =; 17
1762: c5, b3, g4; b7, b4; =; 17
1763: c5, b3, f6; c7, b4; =; 16
1764: c4, b3, d7; a6, b4; =; 19
1765: f4, b3, e4; h2, b4; =; 18
1766: g4, a4, d3; g2, b4; =; 18
1767: g4, b3, e4; g2, b4; =; 15
1768: g4, b3, d3; g2, b4; =; 10
1769: g4, b3, h3; g2, b4; =; 12
1770: g4, b3, d1; g2, b4; =; 13
1771: g4, d3, h3; g2, b4; =; 18
1772: g4, b3, d2; h2, b4; =; 16
1773: g4, d3, g5; h2, b4; =; 20
1774: h4, a4, d3; h2, b4; =; 19
1775: h4, b3, e4; h2, b4; =; 16
1776: h4, b3, d3; h2, b4; =; 11
1777: b3, a3, a5; a1, b4; =; 0
1778: b3, a3, c5; a1, b4; =; 0
1779: b3, a3, c1; a1, b4; =; 0
1780: e3, b2, c5; e1, b4; =; 20
1781: e3, b2, d4; e1, b4; =; 20
1782: e3, b2, f4; e1, b4; =; 16
1783: e3, b2, g3; e1, b4; =; 16
1784: e3, b2, c1; e1, b4; =; 20
1785: e3, a4, f4; f1, b4; =; 17
1786: e3, c4, f4; f1, b4; =; 17
1787: e3, d3, f4; f1, b4; =; 15
1788: e3, d1, f4; f1, b4; =; 17
1789: f3, a4, g6; h3, b4; =; 17
1790: f3, a4, f5; h3, b4; =; 19
1791: f3, a4, g2; h3, b4; =; 17
1792: f3, c4, g6; h3, b4; =; 17
1793: f3, c4, f5; h3, b4; =; 19
1794: f3, c4, g2; h3, b4; =; 17
1795: f3, b3, g6; h3, b4; =; 6
1796: f3, b3, f5; h3, b4; =; 8
1797: f3, b3, g2; h3, b4; =; 6
1798: f3, d1, g6; h3, b4; =; 17
1799: f3, d1, f5; h3, b4; =; 19
1800: f3, d1, g2; h3, b4; =; 17
1801: f3, b3, e5; h2, b4; =; 7
1802: f3, b3, d4; h2, b4; =; 9
1803: f3, b3, h4; h2, b4; =; 7
1804: f3, b3, f2; h2, b4; =; 7
1805: f3, b3, e1; h2, b4; =; 7
1806: f3, b2, f5; h2, b4; =; 20
1807: f3, b2, g5; h2, b4; =; 19
1808: f3, b3, f2; e1, b4; =; 10
1809: f3, b2, b3; e1, b4; =; 10
1810: f3, a4, d5; f1, b4; =; 15
1811: f3, a4, g2; f1, b4; =; 10
1812: f3, b3, c4; f1, b4; =; 11
1813: f3, b3, e4; f1, b4; =; 13
1814: f3, b3, g4; f1, b4; =; 11
1815: f3, b3, h3; f1, b4; =; 11
1816: f3, b3, d1; f1, b4; =; 11
1817: f3, d3, e6; f1, b4; =; 17
1818: f3, d3, g6; f1, b4; =; 17
1819: f3, d3, h5; f1, b4; =; 17
1820: f3, d3, h3; f1, b4; =; 17
1821: f3, d3, e2; f1, b4; =; 17
1822: f3, b2, c5; f1, b4; =; 19
1823: f3, b2, d4; f1, b4; =; 19
1824: f3, b2, f4; f1, b4; =; 17
1825: f3, b2, c1; f1, b4; =; 19
1826: f3, d3, g5; g1, b4; =; 18
1827: f3, b2, e6; g1, b4; =; 18
1828: f3, b2, g6; g1, b4; =; 18
1829: f3, b2, h5; g1, b4; =; 18
1830: f3, b2, e4; g1, b4; =; 22
1831: f3, b2, d3; g1, b4; =; 18

1832: f3, b2, g7; h1, b4; =; 21
1833: f3, b2, d6; h1, b4; =; 23
1834: g3, a4, d3; g1, b4; =; 16
1835: g3, a4, d2; g1, b4; =; 3
1836: g3, a4, h2; g1, b4; =; 3
1837: g3, d3, e6; g1, b4; =; 18
1838: g3, d3, g6; g1, b4; =; 18
1839: g3, d3, h5; g1, b4; =; 18
1840: a3, b2, c5; g1, b4; =; 20
1841: a3, b2, d4; g1, b4; =; 20
1842: a3, b2, f4; g1, b4; =; 18
1843: a3, b2, c1; g1, b4; =; 20
1844: g3, b1, d2; g1, b4; =; 3
1845: g3, a6, b2; h1, b4; =; 21
1846: g3, a4, b1; h1, b4; =; 6
1847: g3, d3, d8; h1, b4; =; 19
1848: g3, b2, b7; h1, b4; =; 21
1849: g3, b1, c4; h1, b4; =; 6
1850: h3, a4, d3; h1, b4; =; 17
1851: h3, d3, e6; h1, b4; =; 19
1852: h3, d3, g6; h1, b4; =; 19
1853: h3, d3, h5; h1, b4; =; 19
1854: h3, b2, c5; h1, b4; =; 21
1855: e2, a4, f5; g2, b4; =; 21
1856: e2, c4, f5; g2, b4; =; 21
1857: e2, b3, f5; g2, b4; =; 10
1858: e2, d1, f5; g2, b4; =; 21
1859: e2, b3, d4; g1, b4; =; 11
1860: e2, b3, h4; g1, b4; =; 9
1861: e2, b3, e1; g1, b4; =; 9
1862: e2, b2, f5; g1, b4; =; 22
1863: f2, a4, f5; h2, b4; =; 20
1864: f2, a4, g5; h2, b4; =; 15
1865: f2, a4, g1; h2, b4; =; 15
1866: f2, c4, f5; h2, b4; =; 20
1867: f2, b3, f5; h2, b4; =; 9
1868: f2, d1, f5; h2, b4; =; 20
1869: e1, a4, f5; g1, b4; =; 22
1870: e1, c4, f5; g1, b4; =; 22
1871: e1, b3, f5; g1, b4; =; 11
1872: e1, d3, f5; g1, b4; =; 22
1873: e1, d1, f5; g1, b4; =; 22
1874: f1, a4, f5; h1, b4; =; 21
1875: f1, a4, g5; h1, b4; =; 16
1876: f1, a4, g1; h1, b4; =; 16
1877: f1, c4, f5; h1, b4; =; 21
1878: f1, c4, g5; h1, b4; =; 16
1879: f1, c4, g1; h1, b4; =; 16
1880: f1, b3, f5; h1, b4; =; 10
1881: f1, d1, f5; h1, b4; =; 21
1882: g4, b2, d3; g2, b3; =; 17
1883: g4, b2, h3; g2, b3; =; 17
1884: g4, b2, g5; h2, b3; =; 19
1885: h4, b2, d3; h2, b3; =; 18
1886: a3, b4, c3; a1, b3; =; 1
1887: a3, b4, c2; a1, b3; =; 1
1888: a3, c3, e3; a1, b3; =; 1
1889: a3, c3, e1; a1, b3; =; 1
1890: a3, d2, e3; a1, b3; =; 1
1891: a3, d2, g1; a1, b3; =; 1
1892: e3, b2, e6; e1, b3; =; 15
1893: e3, b2, g6; e1, b3; =; 15
1894: e3, b2, d5; e1, b3; =; 15
1895: e3, b2, h5; e1, b3; =; 15
1896: e3, b2, h3; e1, b3; =; 15
1897: e3, b2, e2; e1, b3; =; 15
1898: e3, b2, f4; f1, b3; =; 14
1899: f3, b2, g6; h3, b3; =; 16
1900: f3, b2, f5; h3, b3; =; 18
1901: f3, b2, g2; h3, b3; =; 16
1902: f3, b2, e6; f1, b3; =; 16
1903: f3, b2, g6; f1, b3; =; 16
1904: f3, b2, d5; f1, b3; =; 16
1905: f3, b2, h5; f1, b3; =; 16

1906: f3,b2,d3; f1,b3; =;14
 1907: f3,b2,h3; f1,b3; =;16
 1908: f3,b2,e2; f1,b3; =;16
 1909: f3,b2,g2; f1,b3; =; 9
 1910: f3,b2,g2; g1,b3; =;17
 1911: g3,b2,e6; g1,b3; =;17
 1912: g3,b2,g6; g1,b3; =;17
 1913: g3,b2,h5; g1,b3; =;17
 1914: g3,b2,d3; g1,b3; =;15
 1915: g3,b2,d2; g1,b3; =; 4
 1916: g3,b2,h2; g1,b3; =; 4
 1917: g3,b2,d8; h1,b3; =;18
 1918: h3,b2,e6; h1,b3; =;18
 1919: h3,b2,g6; h1,b3; =;18
 1920: h3,b2,h5; h1,b3; =;18
 1921: h3,b2,d3; h1,b3; =;16
 1922: h3,b2,d2; h1,b3; =; 5
 1923: h3,b2,h2; h1,b3; =; 5
 1924: e2,b2,f5; g2,b3; =;20
 1925: f2,b2,f5; h2,b3; =;19
 1926: f2,b2,g5; h2,b3; =;14
 1927: f2,b2,g1; h2,b3; =;14
 1928: e1,b2,f5; g1,b3; =;21
 1929: f1,b2,f5; h1,b3; =;20
 1930: f1,b2,g5; h1,b3; =;15
 1931: f1,b2,g1; h1,b3; =;15
 1932: a8,b8,c6; b6,c7; =;43
 1933: f8,a8,f5; h8,c7; =; 8
 1934: b7,d2,e8; b5,c7; =;52
 1935: b7,c8,f5; c5,c7; =;50
 1936: b7,d5,e3; c5,c7; =;51
 1937: d7,c8,e8; b7,c7; =;47
 1938: d7,b7,d5; b5,c7; =;51
 1939: d7,d2,e8; b5,c7; =;52
 1940: d7,c8,e8; c5,c7; =;50
 1941: d7,c8,f5; c5,c7; =;50
 1942: d7,e8,f5; c5,c7; =;55
 1943: d7,e8,f1; c5,c7; =;55
 1944: d7,a3,b5; c5,c7; =;51
 1945: d7,e8,f7; f5,c7; =;51
 1946: f7,a8,h4; h8,c7; =; 8
 1947: f7,a8,e3; h8,c7; =;31
 1948: f7,a8,g3; h8,c7; =;32
 1949: f7,a8,f2; h8,c7; =;32
 1950: f7,a8,g8; h7,c7; =; 5
 1951: f7,a8,f5; h7,c7; =; 7
 1952: f7,a8,g4; h7,c7; =; 5
 1953: a6,b7,g1; c6,c7; =;68
 1954: a6,b7,e2; d5,c7; =;67
 1955: c6,a7,c8; b8,c7; =;19
 1956: c6,a7,b5; b8,c7; =;19
 1957: c6,b8,d7; a7,c7; =;12
 1958: c6,a6,b8; a7,c7; =;12
 1959: c6,d8,e6; e7,c7; =;36
 1960: c6,e8,f6; e7,c7; =;54
 1961: c6,e7,f5; e6,c7; =;53
 1962: c6,h4,h8; f6,c7; =;45
 1963: c6,h7,h8; f5,c7; =;44
 1964: c6,g6,h8; f5,c7; =;55
 1965: c6,a5,b7; b4,c7; =;42
 1966: c6,b4,d3; c4,c7; =;49
 1967: c6,b3,d4; c4,c7; =;48
 1968: c6,d3,e5; d4,c7; =;72
 1969: c6,e5,g4; f4,c7; =;51
 1970: c6,h1,h2; f4,c7; =;46
 1971: c6,a1,e1; c3,c7; =;47
 1972: c6,g1,h1; e3,c7; =;45
 1973: f6,e8,g7; f8,c7; =; 7
 1974: g6,a8,d7; g8,c7; =; 5
 1975: g6,a8,h7; g8,c7; =; 5
 1976: g6,a8,e6; g8,c7; =; 7
 1977: g6,a8,d8; h8,c7; =; 8
 1978: g6,a8,c5; h8,c7; =; 6
 1979: g6,a8,f4; h8,c7; =; 8
 1980: c5,g6,h8; g5,c7; =;54
 1981: e5,b7,d5; c4,c7; =;48
 1982: c4,a8,c5; a5,c7; =;15
 1983: b3,a3,a8; a1,c7; =;34
 1984: e3,d2,e8; c2,c7; =;44
 1985: f3,a8,g6; h3,c7; =;56
 1986: f3,a8,g2; h3,c7; =;56
 1987: f3,a8,c2; f1,c7; =;17
 1988: f3,a8,g2; f1,c7; =;17
 1989: g3,e8,h4; g5,c7; =;57
 1990: g3,a8,d2; g1,c7; =;38
 1991: g3,a8,h2; g1,c7; =; 6
 1992: c2,b5,f6; a2,c7; =;40
 1993: d2,c3,c8; b3,c7; =;64
 1994: f2,a8,g5; h2,c7; =; 6
 1995: f2,a8,g1; h2,c7; =; 6
 1996: f1,a8,g5; h1,c7; =;44
 1997: f1,a8,g1; h1,c7; =;44
 1998: b6,b8,c7; d6,c6; =;58
 1999: b6,a5,e7; b4,c6; =;49
 2000: b6,d2,e7; b4,c6; =;47
 2001: b6,d2,f6; b4,c6; =;47
 2002: b6,d2,f4; b4,c6; =;46
 2003: b6,a7,b2; d4,c6; =;66
 2004: d6,c7,e7; b7,c6; =;49
 2005: d6,c7,d8; b6,c6; =;32
 2006: d6,a7,e5; d4,c6; =;49
 2007: d6,a7,b2; d4,c6; =;47
 2008: d6,a3,c5; c3,c6; =;32
 2009: f6,c8,f5; d5,c6; =;51
 2010: g6,c3,f7; e6,c6; =;56
 2011: a5,a7,e7; c7,c6; =;67
 2012: a5,c7,f7; c5,c6; =;68
 2013: a5,a4,c3; c4,c6; =;67
 2014: c5,a7,b3; d8,c6; =;67
 2015: c5,a6,c7; b7,c6; =;33
 2016: c5,a6,b4; b7,c6; =;33
 2017: c5,a7,e7; c7,c6; =;47
 2018: c5,a5,a7; c7,c6; =;38
 2019: c5,a7,g8; d7,c6; =;49
 2020: c5,c7,e6; d7,c6; =;43
 2021: c5,a5,b7; a6,c6; =;15
 2022: c5,d7,e5; e6,c6; =;39
 2023: c5,e7,f5; e6,c6; =;53
 2024: c5,d8,h8; f6,c6; =;48
 2025: c5,h4,h8; f6,c6; =;53
 2026: c5,h7,h8; f5,c6; =;51
 2027: c5,a5,b3; a4,c6; =;47
 2028: c5,e5,g4; f4,c6; =;50
 2029: c5,h1,h2; f4,c6; =;51
 2030: c5,a4,b6; b3,c6; =;47
 2031: c5,a1,e1; c3,c6; =;50
 2032: c5,d3,f4; e3,c6; =;71
 2033: c5,g1,h1; e3,c6; =;50
 2034: c5,f5,h1; f3,c6; =;50
 2035: c5,h1,h5; f3,c6; =;52
 2036: c5,a2,b4; b2,c6; =;50
 2037: a4,a7,f7; d4,c6; =;75
 2038: c4,b6,c3; c2,c6; =;63
 2039: c4,c3,e5; c2,c6; =;65
 2040: c4,c3,f2; c2,c6; =;65
 2041: c4,c3,f2; c2,c6; =;65
 2042: e4,b7,c7; c4,c6; =;42
 2043: e4,b7,f4; c4,c6; =;43
 2044: e4,b4,f3; e2,c6; =;46
 2045: f4,a1,b8; h4,c6; =;55
 2046: a3,a7,f8; e5,c6; =;69
 2047: a3,b8,e6; c4,c6; =;70
 2048: a3,b8,d6; c3,c6; =;61
 2049: a3,a7,b4; c3,c6; =;65
 2050: a3,d6,d8; c3,c6; =;61
 2051: a3,a5,a7; c3,c6; =;62
 2052: a3,a5,c7; c3,c6; =;62
 2053: a3,b4,c7; c3,c6; =;63
 2054: a3,e2,e7; c2,c6; =;69
 2055: b3,e7,f6; d4,c6; =;66
 2056: e3,d2,e7; c3,c6; =;44
 2057: a2,a3,b8; c3,c6; =;64
 2058: a2,a3,d8; c3,c6; =;64
 2059: a2,b1,b8; c2,c6; =;63
 2060: a2,b1,d8; c2,c6; =;63
 2061: a2,b8,c3; c1,c6; =;64
 2062: a2,c3,d8; c1,c6; =;64
 2063: c2,b8,c7; a3,c6; =;61
 2064: c2,a7,b8; a3,c6; =;63
 2065: c2,a7,c7; a3,c6; =;61
 2066: c2,e1,e7; a3,c6; =;62
 2067: d2,a7,g7; e5,c6; =;65
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 2069: a1,a3,b1; b3,c6; =;62
 2070: a1,b1,e7; b3,c6; =;62
 2071: a1,c7,e2; c2,c6; =;66
 2072: a1,a2,a7; c2,c6; =;64
 2073: a1,a2,c7; c2,c6; =;64
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 2078: b1,a2,f8; b3,c6; =;63
 2079: b1,b8,c1; c3,c6; =;64
 2080: b1,c1,f8; c3,c6; =;64
 2081: c1,c7,f5; b3,c6; =;65
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 2083: c1,a3,b1; b3,c6; =;62
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 2085: c1,c2,e7; b3,c6; =;65
 2086: c1,c7,e2; a1,c6; =;61
 2087: c1,a4,c3; a1,c6; =;61
 2088: c1,e2,e7; a1,c6; =;62
 2089: c1,e2,f6; a1,c6; =;62
 2090: c1,e2,f4; a1,c6; =;62
 2091: c1,e2,f2; a1,c6; =;62
 2092: d1,a7,e2; d3,c6; =;63
 2093: d1,c7,e2; d3,c6; =;63
 2094: d1,e2,g7; d3,c6; =;64
 2095: e1,b7,e2; d3,c6; =;64
 2096: e1,a6,e2; d3,c6; =;64
 2097: e1,e2,e6; d3,c6; =;63
 2098: e1,a7,f2; e3,c6; =;63
 2099: e1,c7,f2; e3,c6; =;62
 2100: e1,c7,h1; f3,c6; =;67
 2101: f1,a7,g2; f3,c6; =;63
 2102: f1,c7,g2; f3,c6; =;63
 2103: a8,a2,c3; a6,c5; =;68
 2104: a8,b7,c3; b6,c5; =;62
 2105: b8,a2,c3; b6,c5; =;67
 2106: c8,c7,d7; d6,c5; =;68
 2107: d8,c2,g6; b8,c5; =;62
 2108: d8,c2,g2; b8,c5; =;49
 2109: c7,b7,e6; a7,c5; =;10
 2110: c7,b3,e6; a7,c5; =;10
 2111: d7,c2,g4; b7,c5; =;48
 2112: d7,c2,d3; b7,c5; =;48
 2113: d7,c2,g2; b7,c5; =;48
 2114: d7,c2,f1; b7,c5; =;48
 2115: b6,e6,g4; b8,c5; =;15
 2116: b6,e6,f3; b8,c5; =;28
 2117: b6,e6,g2; b8,c5; =;15
 2118: b6,e6,f1; b8,c5; =;15
 2119: b6,b3,e6; b8,c5; =;30
 2120: b6,d3,e6; b8,c5; =;28
 2121: b6,c7,f3; d6,c5; =;58
 2122: b6,c6,c7; d6,c5; =;57
 2123: c6,b3,e1; b8,c5; =;60
 2124: c6,d3,e1; b8,c5; =;60
 2125: c6,a1,b3; b8,c5; =;60
 2126: c6,a1,d3; b8,c5; =;60
 2127: c6,a6,e6; c8,c5; =;14

2128: c6, e6, g4; c8, c5; =; 14
2129: c6, e6, f3; c8, c5; =; 27
2130: c6, e6, g2; c8, c5; =; 14
2131: c6, e6, f1; c8, c5; =; 14
2132: c6, b3, e6; c8, c5; =; 29
2133: c6, d3, e6; c8, c5; =; 27
2134: c6, c2, e6; c8, c5; =; 14
2135: c6, e1, f8; c8, c5; =; 70
2136: c6, e1, g7; c8, c5; =; 70
2137: c6, d7, d8; a7, c5; =; 12
2138: c6, a8, c2; a6, c5; =; 35
2139: c6, b7, f5; a6, c5; =; 15
2140: c6, b7, g4; a6, c5; =; 15
2141: c6, b7, d3; a6, c5; =; 11
2142: c6, b7, f3; a6, c5; =; 15
2143: c6, b7, c2; a6, c5; =; 12
2144: c6, b7, g2; a6, c5; =; 15
2145: c6, b7, f1; a6, c5; =; 15
2146: c6, b3, b7; a6, c5; =; 11
2147: c6, b3, d3; a6, c5; =; 14
2148: c6, b3, c2; a6, c5; =; 14
2149: c6, c2, c8; a6, c5; =; 35
2150: c6, c2, d7; a6, c5; =; 35
2151: c6, c3, d2; a5, c5; =; 45
2152: d6, c2, h7; b8, c5; =; 47
2153: d6, c2, h5; b8, c5; =; 47
2154: d6, c2, g4; b8, c5; =; 40
2155: d6, c2, d3; b8, c5; =; 47
2156: d6, c2, h3; b8, c5; =; 47
2157: d6, c2, g2; b8, c5; =; 40
2158: d6, c2, f1; b8, c5; =; 40
2159: d6, c6, c7; b6, c5; =; 31
2160: a5, b3, e6; a7, c5; =; 32
2161: a5, d3, e6; a7, c5; =; 30
2162: a5, e1, f8; a7, c5; =; 72
2163: a5, a4, b1; c4, c5; =; 66
2164: b5, b7, e2; d5, c5; =; 65
2165: b5, a1, c4; c3, c5; =; 46
2166: b5, a4, b1; d3, c5; =; 65
2167: d5, a1, c4; c3, c5; =; 46
2168: d5, a2, c4; c2, c5; =; 48
2169: e5, c1, e4; g4, c5; =; 56
2170: g5, d1, h4; g3, c5; =; 29
2171: g5, c6, g4; h3, c5; =; 47
2172: h5, e2, h4; h3, c5; =; 28
2173: a4, c8, e6; a6, c5; =; 67
2174: a4, c8, d3; a6, c5; =; 42
2175: a4, c6, e6; a6, c5; =; 63
2176: a4, b3, c8; a6, c5; =; 44
2177: a4, d3, e6; a6, c5; =; 68
2178: c4, a6, e6; c8, c5; =; 59
2179: c4, a7, b5; b7, c5; =; 49
2180: c4, a6, g7; d7, c5; =; 66
2181: c4, a5, c6; b6, c5; =; 60
2182: c4, a5, b3; b6, c5; =; 60
2183: c4, a8, e8; c6, c5; =; 59
2184: c4, a6, e6; c6, c5; =; 65
2185: c4, a4, a6; c6, c5; =; 57
2186: c4, a8, b8; d6, c5; =; 65
2187: c4, a6, b8; d6, c5; =; 65
2188: c4, a6, f8; d6, c5; =; 66
2189: c4, c6, e5; d6, c5; =; 63
2190: c4, f7, h6; e6, c5; =; 66
2191: c4, f4, h8; f6, c5; =; 65
2192: c4, a8, b6; a5, c5; =; 56
2193: c4, b6, c8; a5, c5; =; 41
2194: c4, b6, d7; a5, c5; =; 39
2195: c4, b6, d5; a5, c5; =; 39
2196: c4, a4, b6; a5, c5; =; 39
2197: c4, c1, f2; a5, c5; =; 52
2198: c4, d6, e4; e5, c5; =; 58
2199: c4, a1, c2; a4, c5; =; 51
2200: c4, c1, d1; a4, c5; =; 39
2201: c4, g2, h4; e4, c5; =; 61

2202: c4, g2, h2; e4, c5; =; 61
2203: c4, g1, g2; e4, c5; =; 58
2204: c4, a4, c3; c2, c5; =; 62
2205: c4, c3, d3; c2, c5; =; 64
2206: c4, c3, d1; c2, c5; =; 64
2207: c4, b3, c2; e2, c5; =; 64
2208: c4, a3, a4; c1, c5; =; 61
2209: c4, a4, b1; d1, c5; =; 63
2210: c4, a3, b3; d1, c5; =; 63
2211: c4, d3, e4; d1, c5; =; 65
2212: c4, a1, b3; d1, c5; =; 67
2213: c4, b3, e3; e1, c5; =; 65
2214: c4, c1, e4; e1, c5; =; 66
2215: e4, b8, d5; d6, c5; =; 53
2216: e4, b7, d5; e4, c5; =; 41
2217: e4, c1, d5; e4, c5; =; 65
2218: f4, b3, g7; h4, c5; =; 38
2219: f4, b3, f6; h4, c5; =; 24
2220: f4, b3, g3; h4, c5; =; 20
2221: f4, d3, g7; h4, c5; =; 20
2222: f4, d3, f6; h4, c5; =; 22
2223: f4, d3, g3; h4, c5; =; 20
2224: f4, a1, e8; h4, c5; =; 54
2225: f4, a1, g8; h4, c5; =; 54
2226: f4, a1, d7; h4, c5; =; 54
2227: f4, a1, h7; h4, c5; =; 54
2228: f4, a1, g4; h4, c5; =; 54
2229: f4, a1, f1; h4, c5; =; 54
2230: f4, a1, h1; h4, c5; =; 54
2231: f4, a6, f1; h3, c5; =; 38
2232: f4, g4, h5; h3, c5; =; 24
2233: f4, b3, h5; h3, c5; =; 59
2234: f4, b3, f1; h3, c5; =; 37
2235: f4, d3, h5; h3, c5; =; 21
2236: f4, d3, h1; h3, c5; =; 21
2237: f4, f3, h5; h3, c5; =; 38
2238: f4, f1, h5; h3, c5; =; 38
2239: f4, f1, g4; h3, c5; =; 20
2240: f4, f1, h1; h3, c5; =; 45
2241: a3, c6, d6; c3, c5; =; 60
2242: a3, b1, c3; c2, c5; =; 62
2243: e3, a6, f2; e1, c5; =; 39
2244: f3, c2, f1; h4, c5; =; 55
2245: f3, c2, h1; h4, c5; =; 55
2246: f3, b3, f6; h3, c5; =; 25
2247: f3, b3, g2; h3, c5; =; 9
2248: f3, a6, f2; f1, c5; =; 40
2249: g3, a6, f2; g1, c5; =; 41
2250: h3, c3, g2; f2, c5; =; 59
2251: a2, a6, b1; c2, c5; =; 62
2252: a2, b1, c6; c2, c5; =; 62
2253: c2, a6, c7; a3, c5; =; 61
2254: c2, c6, c7; a3, c5; =; 61
2255: c2, a6, b5; a2, c5; =; 11
2256: c2, a6, b1; a2, c5; =; 11
2257: c2, b5, c6; a2, c5; =; 9
2258: c2, b5, d5; a2, c5; =; 9
2259: c2, b1, c6; a2, c5; =; 9
2260: c2, b1, d5; a2, c5; =; 9
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2262: c2, a6, c1; a1, c5; =; 2
2263: c2, d5, e1; a1, c5; =; 59
2264: c2, d3, e1; a1, c5; =; 62
2265: c2, a2, c1; a1, c5; =; 2
2266: c2, c1, d7; a1, c5; =; 2
2267: c2, c1, c6; a1, c5; =; 2
2268: c2, c1, e6; a1, c5; =; 2
2269: c2, c1, f5; a1, c5; =; 2
2270: c2, c1, f3; a1, c5; =; 2
2271: c2, c1, f1; a1, c5; =; 2
2272: e2, b3, f6; g2, c5; =; 28
2273: e2, a1, d7; g2, c5; =; 56
2274: e2, a1, h7; g2, c5; =; 58
2275: e2, a6, d7; g1, c5; =; 39

2276: e2, c6, d7; g1, c5; =; 37
2277: e2, c6, h7; g1, c5; =; 56
2278: b1, a6, d5; b3, c5; =; 62
2279: b1, d5, e6; b3, c5; =; 62
2280: b1, a2, d7; b3, c5; =; 62
2281: b1, a2, a6; b3, c5; =; 62
2282: b1, a2, e6; b3, c5; =; 62
2283: c1, d5, f5; b3, c5; =; 62
2284: c1, a2, c3; b3, c5; =; 60
2285: c1, c2, d5; b3, c5; =; 62
2286: c1, a6, b5; a1, c5; =; 12
2287: c1, a6, b1; a1, c5; =; 12
2288: c1, d5, e2; a1, c5; =; 60
2289: c1, a4, d5; a1, c5; =; 60
2290: c1, a4, c3; a1, c5; =; 61
2291: c1, d3, e2; a1, c5; =; 61
2292: d1, b7, e2; d3, c5; =; 63
2293: d1, a6, e2; d3, c5; =; 63
2294: d1, e2, e6; d3, c5; =; 62
2295: g1, a2, h2; g3, c5; =; 63
2296: g1, d1, h2; g3, c5; =; 63
2297: h1, e4, h2; h3, c5; =; 57
2298: h1, c3, g2; f2, c5; =; 57
2299: a8, b7, c3; a6, c4; =; 60
2300: b8, b7, c3; b6, c4; =; 59
2301: c8, b7, c3; c6, c4; =; 60
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2303: d8, b4, c2; b8, c4; =; 31
2304: d8, c2, c7; b8, c4; =; 31
2305: d8, c2, e7; b8, c4; =; 31
2306: d8, c2, f4; b8, c4; =; 31
2307: d8, c2, e3; b8, c4; =; 31
2308: d8, c3, d7; d6, c4; =; 67
2309: b7, c3, c6; c5, c4; =; 55
2310: d7, b4, d4; b8, c4; =; 29
2311: d7, b4, e3; b8, c4; =; 23
2312: d7, b4, e1; b8, c4; =; 31
2313: d7, a3, e7; b8, c4; =; 31
2314: d7, a3, b4; b8, c4; =; 31
2315: d7, a1, b4; b8, c4; =; 31
2316: d7, b4, c8; b7, c4; =; 19
2317: d7, b4, c2; b7, c4; =; 30
2318: d7, b2, c2; b7, c4; =; 30
2319: d7, c2, c7; b7, c4; =; 30
2320: d7, c2, e7; b7, c4; =; 30
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2322: d7, c2, f4; b7, c4; =; 30
2323: d7, c2, e3; b7, c4; =; 30
2324: d7, c3, c6; c5, c4; =; 25
2325: f7, a3, f8; h8, c4; =; 2
2326: f7, b2, f8; h8, c4; =; 2
2327: a6, a3, e6; a8, c4; =; 15
2328: a6, e3, e6; a8, c4; =; 15
2329: a6, a1, e6; a8, c4; =; 15
2330: a6, e1, e6; a8, c4; =; 15
2331: b6, e6, f3; a8, c4; =; 15
2332: b6, b4, e6; b8, c4; =; 14
2333: b6, d4, e6; b8, c4; =; 14
2334: b6, a3, e6; b8, c4; =; 14
2335: b6, a3, e6; b8, c4; =; 14
2336: b6, a1, e6; b8, c4; =; 14
2337: b6, e1, e6; b8, c4; =; 14
2338: c6, b7, d4; c8, c4; =; 8
2339: c6, b7, e3; c8, c4; =; 8
2340: c6, b7, e1; c8, c4; =; 8
2341: c6, b4, b7; c8, c4; =; 8
2342: c6, b4, f7; c8, c4; =; 8
2343: c6, b4, e6; c8, c4; =; 13
2344: c6, d4, f7; c8, c4; =; 8
2345: c6, d4, e6; c8, c4; =; 13
2346: c6, a3, b7; c8, c4; =; 8
2347: c6, a3, f7; c8, c4; =; 8
2348: c6, a3, e6; c8, c4; =; 13
2349: c6, e3, f7; c8, c4; =; 8

2350: c6, e3, e6; c8, c4; =; 13
2351: c6, a1, b7; c8, c4; =; 8
2352: c6, a1, f7; c8, c4; =; 8
2353: c6, a1, e6; c8, c4; =; 13
2354: c6, e1, f7; c8, c4; =; 8
2355: c6, e1, e6; c8, c4; =; 13
2356: c6, b7, d4; a6, c4; =; 14
2357: c6, b7, e3; a6, c4; =; 14
2358: c6, b7, e1; a6, c4; =; 14
2359: c6, b6, c2; a6, c4; =; 34
2360: c6, a3, b7; a6, c4; =; 14
2361: c6, a1, b7; a6, c4; =; 14
2362: d6, b6, c2; b8, c4; =; 32
2363: d6, b4, c2; b8, c4; =; 33
2364: d6, c2, c7; b8, c4; =; 46
2365: d6, c2, f6; b8, c4; =; 33
2366: d6, c2, f4; b8, c4; =; 33
2367: d6, c2, e3; b8, c4; =; 33
2368: g6, b2, e7; h8, c4; =; 2
2369: g6, b2, h6; h8, c4; =; 2
2370: g6, c1, e7; h8, c4; =; 2
2371: g6, c1, h6; h8, c4; =; 2
2372: a5, b4, e6; a7, c4; =; 16
2373: a5, e3, e6; a7, c4; =; 16
2374: a5, a1, e6; a7, c4; =; 16
2375: a5, e1, e6; a7, c4; =; 16
2376: b5, c2, e6; a7, c4; =; 16
2377: b5, b4, e6; b7, c4; =; 15
2378: b5, d4, e6; b7, c4; =; 15
2379: b5, a3, e6; b7, c4; =; 15
2380: b5, e3, e6; b7, c4; =; 15
2381: b5, a1, e6; b7, c4; =; 15
2382: b5, e1, e6; b7, c4; =; 15
2383: c5, b6, c2; a5, c4; =; 33
2384: g5, c3, f5; f3, c4; =; 21
2385: g5, b4, d4; g3, c4; =; 33
2386: g5, d4, e3; g3, c4; =; 33
2387: g5, d4, e1; g3, c4; =; 33
2388: g5, a3, d4; g3, c4; =; 33
2389: g5, c3, g7; g3, c4; =; 27
2390: g5, c3, d6; g3, c4; =; 25
2391: g5, c3, h4; g3, c4; =; 26
2392: g5, a1, d4; g3, c4; =; 33
2393: g5, a7, c2; h3, c4; =; 32
2394: g5, c6, e3; h3, c4; =; 34
2395: g5, c6, e1; h3, c4; =; 34
2396: g5, a3, c2; h3, c4; =; 32
2397: g5, c2, e1; h3, c4; =; 34
2398: f4, b4, g7; h4, c4; =; 17
2399: f4, b4, f6; h4, c4; =; 19
2400: f4, b4, a3; h4, c4; =; 17
2401: f4, d4, g7; h4, c4; =; 17
2402: f4, d4, f6; h4, c4; =; 19
2403: f4, d4, g3; h4, c4; =; 17
2404: f4, a3, g7; h4, c4; =; 17
2405: f4, a3, f6; h4, c4; =; 19
2406: f4, a3, g3; h4, c4; =; 17
2407: f4, e3, g7; h4, c4; =; 15
2408: f4, e3, f6; h4, c4; =; 17
2409: f4, e3, a3; h4, c4; =; 15
2410: f4, a1, g7; h4, c4; =; 17
2411: f4, a1, f6; h4, c4; =; 19
2412: f4, a1, g3; h4, c4; =; 17
2413: f4, e1, g7; h4, c4; =; 15
2414: f4, e1, f6; h4, c4; =; 17
2415: f4, e1, g3; h4, c4; =; 15
2416: f4, b6, c2; h3, c4; =; 52
2417: f4, b4, e6; h3, c4; =; 18
2418: f4, b4, h5; h3, c4; =; 18
2419: f4, b4, h1; h3, c4; =; 18
2420: f4, b4, h1; h3, c4; =; 18
2421: f4, d4, e6; h3, c4; =; 18
2422: f4, d4, h5; h3, c4; =; 18
2423: f4, d4, f1; h3, c4; =; 18

2424: f4, d4, h1; h3, c4; =; 18
2425: f4, a3, e6; h3, c4; =; 18
2426: f4, a3, h5; h3, c4; =; 18
2427: f4, a3, f1; h3, c4; =; 18
2428: f4, a3, h1; h3, c4; =; 18
2429: f4, e3, f1; h3, c4; =; 16
2430: f4, e3, h1; h3, c4; =; 18
2431: f4, a1, e6; h3, c4; =; 18
2432: f4, a1, h5; h3, c4; =; 18
2433: f4, a1, f1; h3, c4; =; 18
2434: f4, a1, h1; h3, c4; =; 18
2435: f4, e1, f1; h3, c4; =; 16
2436: f4, e1, h1; h3, c4; =; 16
2437: g4, b6, e3; h2, c4; =; 11
2438: g4, b6, e1; h2, c4; =; 21
2439: a3, c7, e3; a5, c4; =; 60
2440: a3, c7, d2; a5, c4; =; 62
2441: a3, b2, c7; a5, c4; =; 62
2442: a3, b4, d6; c3, c4; =; 59
2443: a3, b4, g3; c3, c4; =; 59
2444: a3, a2, c3; c2, c4; =; 57
2445: a3, a5, d2; a1, c4; =; 1
2446: a3, c5, d2; a1, c4; =; 1
2447: a3, c1, d2; a1, c4; =; 1
2448: a3, b1, c3; c1, c4; =; 60
2449: e3, b6, c2; g2, c4; =; 53
2450: e3, b4, c2; g2, c4; =; 53
2451: f3, c2, g3; h4, c4; =; 54
2452: f3, b4, f6; h3, c4; =; 20
2453: f3, b4, g2; h3, c4; =; 8
2454: f3, d4, f6; h3, c4; =; 20
2455: f3, d4, g2; h3, c4; =; 8
2456: f3, a3, f6; h3, c4; =; 20
2457: f3, a3, g2; h3, c4; =; 8
2458: f3, c3, f6; h3, c4; =; 18
2459: f3, e3, g2; h3, c4; =; 8
2460: f3, c2, e8; h3, c4; =; 55
2461: f3, c2, g8; h3, c4; =; 55
2462: f3, c2, d7; h3, c4; =; 55
2463: f3, c2, h7; h3, c4; =; 55
2464: f3, c2, h5; h3, c4; =; 55
2465: f3, c2, g4; h3, c4; =; 55
2466: f3, c2, f1; h3, c4; =; 55
2467: f3, c2, h1; h3, c4; =; 55
2468: f3, a1, f6; h3, c4; =; 20
2469: f3, a1, g2; h3, c4; =; 8
2470: f3, e1, f6; h3, c4; =; 18
2471: f3, e1, g2; h3, c4; =; 8
2472: f3, a1, c2; f1, c4; =; 13
2473: g3, a5, h2; h1, c4; =; 4
2474: h3, c3, g2; f3, c4; =; 57
2475: a2, b1, c3; c2, c4; =; 59
2476: c2, a5, c1; a1, c4; =; 1
2477: c2, b4, c1; a1, c4; =; 1
2478: c2, c1, c5; a1, c4; =; 1
2479: c2, c1, d4; a1, c4; =; 1
2480: c2, c1, d2; a1, c4; =; 1
2481: c2, e5, g3; e1, c4; =; 59
2482: c2, c1, g3; e1, c4; =; 57
2483: e2, b4, f6; g2, c4; =; 23
2484: e2, d4, f6; g2, c4; =; 23
2485: e2, a3, f6; g2, c4; =; 23
2486: e2, c2, e8; g2, c4; =; 56
2487: e2, c2, g8; g2, c4; =; 56
2488: e2, c2, d7; g2, c4; =; 56
2489: e2, c2, h7; g2, c4; =; 56
2490: e2, c2, g4; g2, c4; =; 56
2491: e2, a1, f6; g2, c4; =; 23
2492: f2, a3, f6; h2, c4; =; 21
2493: f2, c2, e8; h2, c4; =; 55
2494: f2, c2, g8; h2, c4; =; 55
2495: f2, c2, d7; h2, c4; =; 55
2496: f2, a1, f6; h2, c4; =; 21
2497: h2, c3, g2; f2, c4; =; 56

2498: a1, b1, c3; b3, c4; =; 60
2499: a1, a2, c3; c2, c4; =; 60
2500: b1, a2, c3; b3, c4; =; 59
2501: c1, a2, c3; a3, c4; =; 60
2502: c1, b1, c3; b3, c4; =; 58
2503: e1, b4, f6; g1, c4; =; 24
2504: e1, a3, f6; g1, c4; =; 24
2505: e1, e3, f6; g1, c4; =; 21
2506: e1, c2, e8; g1, c4; =; 57
2507: e1, c2, g8; g1, c4; =; 57
2508: e1, c2, d7; g1, c4; =; 57
2509: e1, c2, h7; g1, c4; =; 57
2510: e1, a1, f6; g1, c4; =; 24
2511: f1, a3, f6; h1, c4; =; 22
2512: f1, c2, e8; h1, c4; =; 56
2513: f1, c2, g8; h1, c4; =; 56
2514: f1, c2, d7; h1, c4; =; 56
2515: f1, a1, f6; h1, c4; =; 22
2516: g1, c3, f1; f3, c4; =; 55
2517: g1, c3, h2; g3, c4; =; 55
2518: h1, c3, g2; f1, c4; =; 57
2519: c8, c2, c4; a8, c3; =; 17
2520: d8, c2, d5; b8, c3; =; 22
2521: d8, c2, c4; b8, c3; =; 17
2522: c7, a3, c2; e8, c3; =; 18
2523: c7, c2, c4; a7, c3; =; 16
2524: d7, b4, c2; b8, c3; =; 22
2525: d7, c2, e7; b8, c3; =; 19
2526: d7, a4, c2; b7, c3; =; 19
2527: d7, c2, c8; b7, c3; =; 18
2528: d7, c2, d5; b7, c3; =; 21
2529: d7, c2, c4; b7, c3; =; 17
2530: a6, c2, e6; a8, c3; =; 14
2531: b6, c2, e6; b8, c3; =; 13
2532: c6, b7, c2; c8, c3; =; 7
2533: c6, c2, f7; c8, c3; =; 7
2534: c6, c2, e6; c8, c3; =; 12
2535: c6, c2, e7; a7, c3; =; 18
2536: c6, b7, c2; a6, c3; =; 13
2537: c6, a4, c2; a6, c3; =; 17
2538: c6, b3, c2; a6, c3; =; 13
2539: c6, c2, c8; a6, c3; =; 17
2540: c6, c2, d7; a6, c3; =; 17
2541: c6, c2, d5; a6, c3; =; 19
2542: c6, c2, c4; a6, c3; =; 15
2543: c6, b6, c2; a5, c3; =; 16
2544: d6, c2, d5; b8, c3; =; 24
2545: a5, c2, e6; a7, c3; =; 15
2546: b5, c2, e6; b7, c3; =; 14
2547: g5, c2, d4; g3, c3; =; 12
2548: g5, b5, c2; h3, c3; =; 13
2549: g5, b3, c2; h3, c3; =; 13
2550: g5, c2, c6; h3, c3; =; 13
2551: c4, b3, b5; a4, c3; =; 9
2552: c4, b1, b3; a4, c3; =; 9
2553: f4, c2, g7; h4, c3; =; 14
2554: f4, c2, f6; h4, c3; =; 16
2555: f4, c2, g3; h4, c3; =; 14
2556: f4, c2, d5; h3, c3; =; 17
2557: f4, c2, f1; h3, c3; =; 15
2558: f4, c2, h1; h3, c3; =; 15
2559: g4, c2, f4; f2, c3; =; 6
2560: g4, c2, g6; g2, c3; =; 7
2561: g4, c2, d5; g2, c3; =; 7
2562: g4, c2, d1; g2, c3; =; 13
2563: g4, b6, c2; h2, c3; =; 10
2564: e3, c2, f6; g3, c3; =; 18
2565: e3, c2, d5; g2, c3; =; 19
2566: f3, c2, f6; h3, c3; =; 17
2567: f3, c2, g2; h3, c3; =; 7
2568: g3, b3, h2; h1, c3; =; 3
2569: g3, a2, h2; h1, c3; =; 3
2570: g3, c1, d5; h1, c3; =; 3
2571: g3, c1, c4; h1, c3; =; 3

2572: g3,c1,g2; h1,c3; =; 3
2573: e2,c2,f6; g2,c3; =; 19
2574: f2,c2,f6; h2,c3; =; 18
2575: e1,c2,f6; g1,c3; =; 20
2576: f1,c2,f6; h1,c3; =; 19
2577: b4,b3,c1; b1,c2; =; 8
2578: g3,c1,e3; h1,c2; =; 2
2579: g3,c1,d2; h1,c2; =; 2
2580: g3,c1,h2; h1,c2; =; 2
2581: a8,b8,c1; b6,d7; =; 84
2582: a8,b8,e1; b6,d7; =; 87
2583: a8,b2,b8; b6,d7; =; 88
2584: d8,a7,g3; d6,d7; =; 90
2585: c7,a6,b8; d5,d7; =; 84
2586: e7,a8,d6; c6,d7; =; 32
2587: e7,a6,b8; d5,d7; =; 85
2588: d6,b7,d8; c8,d7; =; 28
2589: d6,b6,c8; b7,d7; =; 28
2590: d6,e8,f6; f7,d7; =; 34
2591: d6,f8,g6; f7,d7; =; 39
2592: d6,e7,g8; g7,d7; =; 36
2593: d6,b8,d8; b6,d7; =; 44
2594: d6,a5,b7; b6,d7; =; 43
2595: d6,d8,f8; f6,d7; =; 43
2596: d6,f7,g5; f6,d7; =; 66
2597: d6,b8,f7; b5,d7; =; 48
2598: d6,a6,b4; b5,d7; =; 84
2599: d6,a2,b8; b5,d7; =; 49
2600: d6,f4,g6; f5,d7; =; 85
2601: d6,f4,g5; g5,d7; =; 84
2602: d6,b5,c3; c4,d7; =; 81
2603: d6,c4,e3; d4,d7; =; 47
2604: d6,c3,e4; d4,d7; =; 47
2605: d6,e3,f5; e4,d7; =; 81
2606: d6,f5,h4; g4,d7; =; 50
2607: d6,a1,e1; c3,d7; =; 44
2608: d6,g1,h1; e3,d7; =; 43
2609: d6,f2,g4; f3,d7; =; 84
2610: f6,a6,b8; d6,d7; =; 86
2611: c5,d8,f8; g5,d7; =; 49
2612: d5,b8,d8; b5,d7; =; 48
2613: d5,d8,f8; f5,d7; =; 48
2614: e5,a8,d6; c6,d7; =; 26
2615: e5,b8,d8; a5,d7; =; 49
2616: e5,h1,h5; f3,d7; =; 85
2617: d4,a2,b8; b5,d7; =; 70
2618: b3,b8,c4; b5,d7; =; 74
2619: b3,a6,b8; d4,d7; =; 73
2620: f3,e4,f8; f5,d7; =; 74
2621: f3,g4,h7; f5,d7; =; 73
2622: f3,f8,g4; g5,d7; =; 74
2623: g8,f7,h6; e7,d6; =; 96
2624: a7,b7,b8; c7,d6; =; 79
2625: a7,a6,f7; a5,d6; =; 85
2626: b7,a6,f7; b5,d6; =; 84
2627: d7,b8,c6; d5,d6; =; 84
2628: d7,a6,c6; c4,d6; =; 83
2629: f7,b1,f1; h8,d6; =; 35
2630: f7,b7,g6; f5,d6; =; 84
2631: g7,b7,g6; g5,d6; =; 85
2632: c6,f7,g5; e7,d6; =; 80
2633: c6,a6,c7; a5,d6; =; 82
2634: c6,b7,h5; e5,d6; =; 81
2635: c6,a4,b2; b4,d6; =; 82
2636: c6,a6,f7; c4,d6; =; 83
2637: c6,b5,f7; c4,d6; =; 48
2638: c6,b7,d7; d4,d6; =; 80
2639: c6,b7,g4; d4,d6; =; 80
2640: c6,d7,f7; d4,d6; =; 80
2641: c6,f7,g4; d4,d6; =; 82
2642: c6,a4,b7; d4,d6; =; 81
2643: c6,e4,f2; d4,d6; =; 81
2644: c6,b7,h6; e4,d6; =; 81
2645: e6,b8,c6; c5,d6; =; 82
2646: e6,e7,g6; g5,d6; =; 83
2647: e6,b7,d7; d4,d6; =; 81
2648: e6,d7,f7; d4,d6; =; 81
2649: e6,f7,g4; d4,d6; =; 82
2650: e6,a4,b7; d4,d6; =; 82
2651: e6,b2,c4; d4,d6; =; 81
2652: e6,b7,g6; e4,d6; =; 83
2653: e6,b7,f5; e4,d6; =; 48
2654: f6,e6,f7; e4,d6; =; 83
2655: g6,a8,b1; h8,d6; =; 32
2656: g6,a8,f1; h8,d6; =; 34
2657: g6,b7,h5; g4,d6; =; 83
2658: h6,d7,h5; f5,d6; =; 85
2659: b5,c7,e6; e5,d6; =; 82
2660: b5,a6,f7; d4,d6; =; 82
2661: b5,a4,d7; b3,d6; =; 81
2662: b5,a4,f7; b3,d6; =; 80
2663: b5,c4,e1; c3,d6; =; 78
2664: d5,d7,f8; e8,d6; =; 84
2665: d5,a7,c8; b7,d6; =; 43
2666: d5,a6,b8; b7,d6; =; 47
2667: d5,b6,d7; c7,d6; =; 40
2668: d5,d7,f6; e7,d6; =; 41
2669: d5,b5,c7; b6,d6; =; 38
2670: d5,e7,f5; f6,d6; =; 38
2671: d5,f7,g5; f6,d6; =; 57
2672: d5,a6,b4; b5,d6; =; 83
2673: d5,f4,g6; f5,d6; =; 84
2674: d5,f5,h6; g5,d6; =; 81
2675: d5,f5,h4; g4,d6; =; 49
2676: d5,a4,b2; b3,d6; =; 81
2677: d5,b3,d2; c3,d6; =; 80
2678: d5,a1,e1; c3,d6; =; 47
2679: d5,c3,e2; d3,d6; =; 78
2680: d5,c2,e3; d3,d6; =; 79
2681: d5,d2,f3; e3,d6; =; 80
2682: d5,g1,h1; e3,d6; =; 48
2683: d5,f2,g4; f3,d6; =; 82
2684: d5,h1,h5; f3,d6; =; 49
2685: f5,a7,f7; c5,d6; =; 84
2686: f5,c6,e7; c5,d6; =; 82
2687: f5,b7,g6; d4,d6; =; 82
2688: f5,c1,e4; e3,d6; =; 79
2689: f5,b7,g4; f3,d6; =; 81
2690: f5,d7,g4; f3,d6; =; 81
2691: h5,b7,g6; f5,d6; =; 82
2692: a4,b5,b8; c5,d6; =; 79
2693: a4,e6,e8; c4,d6; =; 76
2694: a4,b5,d7; c4,d6; =; 78
2695: a4,b5,g6; c4,d6; =; 78
2696: b4,a5,b7; b6,d6; =; 66
2697: b4,b3,f7; d3,d6; =; 78
2698: d4,a4,a8; c6,d6; =; 73
2699: e4,a1,d3; c3,d6; =; 72
2700: f4,c8,f7; c5,d6; =; 81
2701: f4,b7,f3; d3,d6; =; 79
2702: g4,a6,f5; e4,d6; =; 78
2703: g4,c6,c8; e4,d6; =; 76
2704: b3,c8,e6; d3,d6; =; 73
2705: b3,b7,d7; d3,d6; =; 78
2706: b3,e6,e8; d3,d6; =; 73
2707: b3,b5,b7; d3,d6; =; 73
2708: b3,b5,d7; d3,d6; =; 73
2709: b3,a3,d8; d3,d6; =; 75
2710: b3,a3,f8; d3,d6; =; 75
2711: b3,a3,g7; d3,d6; =; 77
2712: b3,b1,e6; d3,d6; =; 75
2713: c3,f7,g6; e4,d6; =; 80
2714: e3,a6,c8; c4,d6; =; 81
2715: f3,b8,g3; d3,d6; =; 75
2716: f3,d8,g3; d3,d6; =; 75
2717: f3,a7,g3; d3,d6; =; 77
2718: f3,d7,f7; d3,d6; =; 78
2719: f3,d7,f5; d3,d6; =; 73
2720: f3,c6,c8; d3,d6; =; 74
2721: f3,c6,e8; d3,d6; =; 74
2722: f3,c6,f1; d3,d6; =; 75
2723: f3,f5,f7; d3,d6; =; 73
2724: b2,a8,b3; d3,d6; =; 76
2725: b2,b3,c8; d3,d6; =; 76
2726: b2,b3,e8; d3,d6; =; 76
2727: b2,a2,e8; d3,d6; =; 76
2728: b2,a8,c1; d2,d6; =; 75
2729: b2,c1,c8; d2,d6; =; 75
2730: b2,c1,e8; d2,d6; =; 75
2731: e2,a1,d3; c3,d6; =; 72
2732: f2,c8,f3; d3,d6; =; 77
2733: f2,e8,f3; d3,d6; =; 77
2734: f2,f3,g8; d3,d6; =; 77
2735: f2,c8,e1; d2,d6; =; 76
2736: f2,e1,e8; d2,d6; =; 76
2737: f2,e1,g8; d2,d6; =; 76
2738: b1,a2,f7; b3,d6; =; 73
2739: b1,c1,f7; c3,d6; =; 74
2740: b1,d7,f2; d2,d6; =; 78
2741: c1,b2,g8; c3,d6; =; 74
2742: c1,a4,g8; d3,d6; =; 75
2743: c1,d1,g8; d3,d6; =; 75
2744: e1,a8,g4; d3,d6; =; 75
2745: e1,a8,h3; d3,d6; =; 75
2746: e1,a8,d1; d3,d6; =; 75
2747: e1,a8,h1; d3,d6; =; 75
2748: e1,g4,h7; d3,d6; =; 75
2749: e1,h3,h7; d3,d6; =; 75
2750: e1,d1,h7; d3,d6; =; 75
2751: e1,h1,h7; d3,d6; =; 75
2752: e1,a8,f2; e3,d6; =; 74
2753: e1,f2,h7; e3,d6; =; 74
2754: f1,b7,e1; e3,d6; =; 75
2755: f1,b7,g2; f3,d6; =; 73
2756: g1,b7,h2; g3,d6; =; 74
2757: d7,a3,d2; b8,d5; =; 46
2758: d7,d2,h8; b8,d5; =; 49
2759: d7,d2,h6; b8,d5; =; 49
2760: d7,d2,e3; b8,d5; =; 46
2761: d7,d2,g3; b8,d5; =; 82
2762: f7,e3,f1; h8,d5; =; 5
2763: f7,d2,f1; h8,d5; =; 47
2764: f7,a1,g8; h8,d5; =; 5
2765: f7,b1,e3; h8,d5; =; 5
2766: f7,b1,g3; h8,d5; =; 6
2767: f7,b1,h2; h8,d5; =; 5
2768: f7,f1,g3; h8,d5; =; 6
2769: f7,f1,h2; h8,d5; =; 5
2770: b6,d2,h7; b6,d5; =; 66
2771: b6,a5,d2; c8,d5; =; 65
2772: b6,d2,h6; c8,d5; =; 67
2773: c6,c7,f1; c8,d5; =; 37
2774: c6,a5,b1; c8,d5; =; 66
2775: c6,a5,f1; c8,d5; =; 66
2776: c6,b1,f8; c8,d5; =; 37
2777: c6,b1,h8; c8,d5; =; 66
2778: c6,b1,c7; c8,d5; =; 37
2779: c6,b1,g7; c8,d5; =; 37
2780: c6,b1,h6; c8,d5; =; 66
2781: c6,b1,g5; c8,d5; =; 37
2782: c6,f1,f8; c8,d5; =; 37
2783: c6,f1,h8; c8,d5; =; 66
2784: c6,f1,g7; c8,d5; =; 37
2785: c6,f1,h6; c8,d5; =; 66
2786: c6,f1,g5; c8,d5; =; 37
2787: c6,d2,h8; a7,d5; =; 80
2788: c6,d2,h6; a7,d5; =; 80
2789: c6,d2,g3; a7,d5; =; 30
2790: g6,a8,d2; h8,d5; =; 44
2791: g6,b8,f1; h8,d5; =; 5
2792: g6,c7,f1; h8,d5; =; 6
2793: g6,b6,f1; h8,d5; =; 5

2794:	g6,a1,h7;	h8,d5;	=; 5	2868:	f3,a1,h8;	h2,d5;	=;24	2942:	c6,d2,h6;	a8,d4;	=;66
2795:	g6,b1,b8;	h8,d5;	=; 5	2869:	b2,b6,c1;	d2,d5;	=;74	2943:	c6,b7,f3;	c8,d4;	=;17
2796:	g6,b1,c7;	h8,d5;	=; 7	2870:	b2,c1,d6;	d2,d5;	=;74	2944:	c6,b7,f1;	c8,d4;	=;17
2797:	g6,b1,b6;	h8,d5;	=; 5	2871:	f2,d6,e1;	d2,d5;	=;75	2945:	c6,e6,f3;	c8,d4;	=;19
2798:	a5,b1,f8;	a7,d5;	=;46	2872:	f2,e1,f6;	d2,d5;	=;75	2946:	c6,e6,f1;	c8,d4;	=;19
2799:	a5,f1,f8;	a7,d5;	=;46	2873:	c1,b2,e7;	c3,d5;	=;73	2947:	c6,b3,b7;	c8,d4;	=;17
2800:	c5,b4,f6;	c3,d5;	=;79	2874:	c1,b2,b6;	c3,d5;	=;73	2948:	c6,b3,f7;	c8,d4;	=;17
2801:	c5,e1,f6;	c3,d5;	=;77	2875:	c1,b2,f6;	c3,d5;	=;73	2949:	c6,b3,e6;	c8,d4;	=;19
2802:	c5,e1,g5;	c3,d5;	=;77	2876:	e1,c7,f2;	e3,d5;	=;73	2950:	c6,f3,f7;	c8,d4;	=;17
2803:	c5,e1,g3;	c3,d5;	=;78	2877:	e1,b6,f2;	e3,d5;	=;73	2951:	c6,b1,b7;	c8,d4;	=;17
2804:	e5,b6,f4;	e3,d5;	=;79	2878:	e1,f2,f6;	e3,d5;	=;73	2952:	c6,b1,f7;	c8,d4;	=;17
2805:	e5,b6,c1;	e3,d5;	=;77	2879:	c8,c4,f1;	a8,d4;	=;17	2953:	c6,b1,e6;	c8,d4;	=;19
2806:	e5,a5,c1;	e3,d5;	=;78	2880:	c8,c2,d2;	a8,d4;	=;40	2954:	c6,f1,f7;	c8,d4;	=;17
2807:	e5,a3,c1;	e3,d5;	=;78	2881:	c8,d2,d5;	a8,d4;	=;40	2955:	c6,c4,d2;	a7,d4;	=;16
2808:	f5,a7,e5;	c5,d5;	=;80	2882:	c8,b1,c4;	a8,d4;	=;17	2956:	c6,d2,f7;	a7,d4;	=;18
2809:	d4,a8,b6;	d8,d5;	=;73	2883:	d8,c4,f3;	b8,d4;	=;19	2957:	c6,c4,f3;	a6,d4;	=;15
2810:	d4,a4,b6;	c7,d5;	=;77	2884:	d8,c4,f1;	b8,d4;	=;19	2958:	c6,c4,f1;	a6,d4;	=;15
2811:	d4,a5,b3;	b6,d5;	=;76	2885:	d8,b1,c4;	b8,d4;	=;19	2959:	c6,b1,c4;	a6,d4;	=;15
2812:	d4,a8,c5;	c6,d5;	=;72	2886:	c7,a4,e2;	a8,d4;	=; 6	2960:	g6,b8,d2;	h8,d4;	=; 4
2813:	d4,b5,d6;	c6,d5;	=;72	2887:	c7,a4,d1;	a8,d4;	=; 6	2961:	g6,c7,d2;	h8,d4;	=; 5
2814:	d4,g8,h8;	e6,d5;	=;77	2888:	c7,d1,d5;	a8,d4;	=; 4	2962:	g6,d7,f1;	h8,d4;	=; 4
2815:	d4,d6,f5;	e6,d5;	=;73	2889:	c7,b8,f1;	a7,d4;	=; 5	2963:	g6,b6,d2;	h8,d4;	=; 4
2816:	d4,d8,h8;	f6,d5;	=;74	2890:	c7,c4,f3;	a7,d4;	=;16	2964:	g6,e6,f1;	h8,d4;	=; 5
2817:	d4,d6,h8;	f6,d5;	=;75	2891:	c7,c4,f1;	a7,d4;	=;16	2965:	g6,b3,d7;	h8,d4;	=; 4
2818:	d4,f4,h8;	f6,d5;	=;74	2892:	c7,c2,d2;	a7,d4;	=;39	2966:	g6,b3,h7;	h8,d4;	=; 4
2819:	d4,h4,h8;	f6,d5;	=;77	2893:	c7,d2,d5;	a7,d4;	=;39	2967:	g6,b3,e6;	h8,d4;	=; 5
2820:	d4,b4,c6;	b5,d5;	=;68	2894:	c7,b1,c4;	a7,d4;	=;16	2968:	g6,b1,d7;	h8,d4;	=; 4
2821:	d4,h7,h8;	f5,d5;	=;79	2895:	d7,c4,d2;	b8,d4;	=;19	2969:	g6,b1,h7;	h8,d4;	=; 4
2822:	d4,e6,f4;	f5,d5;	=;69	2896:	d7,d2,f7;	b8,d4;	=;40	2970:	g6,b1,e6;	h8,d4;	=; 5
2823:	d4,f6,h5;	g5,d5;	=;79	2897:	d7,c4,f3;	b7,d4;	=;18	2971:	g6,f1,h7;	h8,d4;	=; 4
2824:	d4,b4,c2;	b3,d5;	=;76	2898:	d7,c4,f1;	b7,d4;	=;18	2972:	a5,e6,f3;	a7,d4;	=;22
2825:	d4,e2,f4;	f3,d5;	=;76	2899:	d7,b1,c4;	b7,d4;	=;18	2973:	a5,e6,f1;	a7,d4;	=;22
2826:	d4,h1,h5;	f3,d5;	=;84	2900:	f7,b3,g8;	h8,d4;	=; 4	2974:	a5,c4,e6;	a7,d4;	=;22
2827:	d4,f4,h3;	g3,d5;	=;80	2901:	f7,b3,f5;	h8,d4;	=; 5	2975:	a5,e4,e6;	a7,d4;	=;22
2828:	d4,a3,b5;	b2,d5;	=;81	2902:	f7,b3,g4;	h8,d4;	=; 5	2976:	a5,b3,e6;	a7,d4;	=;22
2829:	d4,b3,d2;	c2,d5;	=;78	2903:	f7,d2,g3;	h8,d4;	=; 4	2977:	a5,d2,d8;	a7,d4;	=;67
2830:	d4,d2,f3;	e2,d5;	=;78	2904:	f7,d2,h2;	h8,d4;	=; 4	2978:	a5,b1,e6;	a7,d4;	=;22
2831:	f4,c8,e5;	c5,d5;	=;77	2905:	f7,b1,g8;	h8,d4;	=; 4	2979:	c4,d1,d5;	a3,d4;	=;73
2832:	f4,e8,f1;	h4,d5;	=;81	2906:	f7,b1,f5;	h8,d4;	=; 5	2980:	e4,a1,d3;	c3,d4;	=;76
2833:	f4,b6,f6;	h4,d5;	=;79	2907:	f7,b1,g4;	h8,d4;	=; 4	2981:	f4,c4,f6;	h4,d4;	=;16
2834:	f4,a5,f6;	h4,d5;	=;26	2908:	f7,f1,g8;	h8,d4;	=; 4	2982:	f4,c4,g3;	h4,d4;	=;16
2835:	f4,a3,f6;	h4,d5;	=;75	2909:	f7,f1,f5;	h8,d4;	=; 5	2983:	f4,e4,g7;	h4,d4;	=;14
2836:	f4,c3,f6;	h4,d5;	=;80	2910:	f7,f1,g4;	h8,d4;	=; 4	2984:	f4,e4,f6;	h4,d4;	=;16
2837:	f4,a1,f6;	h4,d5;	=;26	2911:	a6,e6,f1;	a8,d4;	=;21	2985:	f4,e4,g3;	h4,d4;	=;14
2838:	f4,b1,e8;	h4,d5;	=;81	2912:	a6,d2,h8;	a8,d4;	=;66	2986:	f4,b3,f6;	h4,d4;	=;16
2839:	f4,b1,g8;	h4,d5;	=;81	2913:	a6,d2,g7;	a8,d4;	=;66	2987:	f4,b3,g3;	h4,d4;	=;16
2840:	f4,b1,h7;	h4,d5;	=;80	2914:	a6,d2,h6;	a8,d4;	=;66	2988:	f4,b1,f6;	h4,d4;	=;16
2841:	f4,f1,g8;	h4,d5;	=;81	2915:	a6,d2,g5;	a8,d4;	=;66	2989:	f4,b1,g3;	h4,d4;	=;16
2842:	f4,f1,h7;	h4,d5;	=;81	2916:	a6,b1,e6;	a8,d4;	=;21	2990:	f4,f1,f6;	h4,d4;	=;16
2843:	f4,f5,h4;	h3,d5;	=;80	2917:	b6,a6,d1;	a8,d4;	=; 2	2991:	f4,f1,g3;	h4,d4;	=;16
2844:	f4,f3,h4;	h3,d5;	=;80	2918:	b6,d2,h7;	a8,d4;	=;66	2992:	f4,f3,f5;	h3,d4;	=;79
2845:	f4,b1,d2;	h3,d5;	=;79	2919:	b6,e2,e8;	a8,d4;	=; 6	2993:	f4,d2,g3;	h3,d4;	=;15
2846:	b3,d6,e6;	d3,d5;	=;72	2920:	b6,a7,e2;	b8,d4;	=; 3	2994:	b3,c4,e6;	d3,d4;	=;71
2847:	b3,a3,e6;	d3,d5;	=;74	2921:	b6,a7,b1;	b8,d4;	=;15	2995:	b3,c4,h3;	d3,d4;	=;71
2848:	b3,a7,g3;	a1,d5;	=; 7	2922:	b6,a7,f1;	b8,d4;	=;15	2996:	b3,c7,e2;	a1,d4;	=;10
2849:	b3,a7,g1;	a1,d5;	=; 7	2923:	b6,c7,d2;	b8,d4;	=;65	2997:	b3,b6,e2;	a1,d4;	=; 8
2850:	b3,c7,g3;	a1,d5;	=; 7	2924:	b6,e7,f1;	b8,d4;	=;15	2998:	b3,d6,e2;	a1,d4;	=; 8
2851:	b3,c7,g1;	a1,d5;	=; 7	2925:	b6,d6,e2;	b8,d4;	=; 5	2999:	b3,a5,e2;	a1,d4;	=; 8
2852:	b3,e7,g3;	a1,d5;	=; 7	2926:	b6,e6,f3;	b8,d4;	=;20	3000:	b3,b5,g3;	a1,d4;	=; 6
2853:	b3,e7,g1;	a1,d5;	=; 7	2927:	b6,e6,f1;	b8,d4;	=;20	3001:	b3,b5,g1;	a1,d4;	=; 6
2854:	b3,b6,g3;	a1,d5;	=; 9	2928:	b6,a5,d2;	b8,d4;	=;65	3002:	b3,d5,g1;	a1,d4;	=; 6
2855:	b3,b6,g1;	a1,d5;	=; 9	2929:	b6,h3,e6;	b8,d4;	=;20	3003:	b3,a4,g3;	a1,d4;	=; 8
2856:	b3,d6,g3;	a1,d5;	=; 7	2930:	b6,d2,d8;	b8,d4;	=;65	3004:	b3,a4,g1;	a1,d4;	=; 8
2857:	b3,d6,g1;	a1,d5;	=; 7	2931:	b6,d2,f8;	b8,d4;	=;65	3005:	b3,e4,g3;	a1,d4;	=; 8
2858:	b3,f6,g3;	a1,d5;	=; 9	2932:	b6,d2,h8;	b8,d4;	=;65	3006:	b3,e4,g1;	a1,d4;	=; 8
2859:	b3,f6,g1;	a1,d5;	=; 9	2933:	b6,d2,g7;	b8,d4;	=;65	3007:	b3,a3,e6;	a1,d4;	=; 2
2860:	b3,g3,g5;	a1,d5;	=; 9	2934:	b6,d2,h6;	b8,d4;	=;65	3008:	b3,a3,c6;	a1,d4;	=; 2
2861:	b3,g1,g5;	a1,d5;	=; 9	2935:	b6,d2,g5;	b8,d4;	=;65	3009:	b3,a3,e6;	a1,d4;	=; 2
2862:	b3,g1,g3;	a1,d5;	=; 9	2936:	b6,e2,e7;	b8,d4;	=; 3	3010:	b3,a3,f5;	a1,d4;	=; 2
2863:	e3,a1,d3;	c3,d5;	=;71	2937:	b6,b1,e7;	b8,d4;	=;15	3011:	b3,a3,f3;	a1,d4;	=; 2
2864:	f3,c6,d6;	d3,d5;	=;73	2938:	b6,b1,e6;	b8,d4;	=;20	3012:	b3,a3,e2;	a1,d4;	=; 2
2865:	f3,c6,g3;	d3,d5;	=;74	2939:	b6,b7,d2;	c8,d4;	=;64	3013:	b3,a3,g2;	a1,d4;	=; 2
2866:	f3,a5,h8;	h2,d5;	=;24	2940:	b6,d2,f7;	c8,d4;	=;64	3014:	b3,a3,b1;	a1,d4;	=; 2
2867:	f3,c3,h8;	h2,d5;	=;24	2941:	c6,d2,h8;	a8,d4;	=;66	3015:	b3,a3,f1;	a1,d4;	=; 2

3016: b3, e2, e7; a1, d4; =; 10
 3017: b3, e2, f6; a1, d4; =; 8
 3018: b3, e2, g5; a1, d4; =; 8
 3019: b3, e2, g3; a1, d4; =; 8
 3020: b3, d1, g3; a1, d4; =; 8
 3021: b3, d1, g1; a1, d4; =; 8
 3022: b3, b5, e2; b1, d4; =; 3
 3023: b3, d5, e2; b1, d4; =; 5
 3024: b3, a4, e2; b1, d4; =; 7
 3025: b3, c4, e2; b1, d4; =; 3
 3026: b3, c2, e2; b1, d4; =; 3
 3027: b3, e2, e4; b1, d4; =; 7
 3028: b3, d1, e2; b1, d4; =; 7
 3029: f3, c6, e4; d3, d4; =; 72
 3030: f3, c4, f6; h3, d4; =; 17
 3031: f3, b3, f6; h3, d4; =; 17
 3032: f3, b1, f6; h3, d4; =; 17
 3033: f3, f1, f6; h3, d4; =; 17
 3034: f3, c4, h8; h2, d4; =; 9
 3035: f3, e4, h8; h2, d4; =; 9
 3036: f3, b3, h8; h2, d4; =; 9
 3037: f3, b1, h8; h2, d4; =; 9
 3038: g3, b5, h2; g1, d4; =; 3
 3039: g3, a4, h2; g1, d4; =; 3
 3040: g3, a2, h2; g1, d4; =; 3
 3041: d2, f5, h3; f1, d4; =; 70
 3042: d2, d1, h3; f1, d4; =; 70
 3043: e2, a1, d3; c3, d4; =; 69
 3044: e2, d2, f5; g2, d4; =; 15
 3045: e2, d2, e4; g2, d4; =; 67
 3046: f2, b5, g5; h2, d4; =; 3
 3047: f2, c4, f6; h2, d4; =; 18
 3048: f2, b3, f6; h2, d4; =; 18
 3049: f2, b1, f6; h2, d4; =; 18
 3050: f2, d1, g1; h2, d4; =; 3
 3051: f1, c4, f6; h1, d4; =; 19
 3052: f1, b3, f6; h1, d4; =; 19
 3053: f1, b1, f6; h1, d4; =; 19
 3054: c8, b8, d2; a8, d3; =; 5
 3055: c8, b4, d2; a8, d3; =; 5
 3056: c8, c4, d2; a8, d3; =; 16
 3057: d8, c4, d2; b8, d3; =; 18
 3058: c7, a3, d2; a8, d3; =; 16
 3059: c7, b8, d2; a7, d3; =; 4
 3060: c7, b4, d2; a7, d3; =; 4
 3061: c7, c4, d2; a7, d3; =; 15
 3062: d7, c4, d2; b7, d3; =; 17
 3063: f7, d2, g8; h8, d3; =; 3
 3064: f7, d2, f5; h8, d3; =; 3
 3065: f7, d2, g4; h8, d3; =; 3
 3066: a6, a7, d2; a8, d3; =; 15
 3067: a6, d2, e7; a8, d3; =; 15
 3068: a6, d2, e6; a8, d3; =; 20
 3069: b6, a7, d2; b8, d3; =; 14
 3070: b6, d2, e7; b8, d3; =; 14
 3071: b6, d2, e6; b8, d3; =; 19
 3072: c6, b7, d2; c8, d3; =; 16
 3073: c6, d2, f7; c8, d3; =; 16
 3074: c6, d2, e6; c8, d3; =; 18
 3075: c6, b7, d2; a6, d3; =; 9
 3076: c6, c4, d2; a6, d3; =; 14
 3077: c6, b3, d2; a6, d3; =; 9
 3078: g6, d2, d7; h8, d3; =; 3
 3079: g6, d2, h7; h8, d3; =; 3
 3080: g6, d2, e6; h8, d3; =; 3
 3081: a5, d2, e6; a7, d3; =; 21
 3082: b5, d2, e6; b7, d3; =; 20
 3083: g5, d2, g4; g3, d3; =; 11
 3084: g5, d1, d2; g3, d3; =; 11
 3085: g5, d2, e3; h3, d3; =; 12
 3086: h5, d2, g4; h3, d3; =; 12
 3087: h5, d1, d2; h3, d3; =; 12
 3088: c4, c3, d1; a3, d3; =; 13
 3089: f4, d2, g7; h4, d3; =; 12

3090: f4, d2, f6; h4, d3; =; 11
 3091: f4, d2, g3; h4, d3; =; 12
 3092: h4, d2, g4; g2, d3; =; 4
 3093: h4, d2, h6; h2, d3; =; 5
 3094: h4, d2, e5; h2, d3; =; 5
 3095: b3, a3, b4; a1, d3; =; 1
 3096: b3, a3, d4; a1, d3; =; 1
 3097: b3, a3, e1; a1, d3; =; 1
 3098: b3, a2, e5; b1, d3; =; 6
 3099: b3, a2, e1; b1, d3; =; 2
 3100: b3, a2, g1; b1, d3; =; 6
 3101: c3, b2, b4; a3, d3; =; 10
 3102: e3, d2, f6; g3, d3; =; 14
 3103: e3, d2, f5; g2, d3; =; 9
 3104: f3, d2, f6; h3, d3; =; 12
 3105: f3, d2, g6; h3, d3; =; 5
 3106: f3, d2, g2; h3, d3; =; 5
 3107: f3, d2, h8; h2, d3; =; 6
 3108: g3, c3, e3; g1, d3; =; 4
 3109: g3, c3, h2; g1, d3; =; 2
 3110: g3, c1, e3; g1, d3; =; 4
 3111: g3, c1, h2; g1, d3; =; 2
 3112: h3, f3, g1; h1, d3; =; 1
 3113: f2, d2, f6; h2, d3; =; 13
 3114: e1, d2, f4; g1, d3; =; 5
 3115: f1, d2, f6; h1, d3; =; 14
 3116: a6, a5, d1; a4, d2; =; 14
 3117: a6, d1, e3; a4, d2; =; 14
 3118: b6, d1, g4; a4, d2; =; 14
 3119: b6, a5, d1; b4, d2; =; 13
 3120: b6, b2, d1; b4, d2; =; 11
 3121: b6, d1, e3; b4, d2; =; 13
 3122: c4, b7, d1; a4, d2; =; 11
 3123: c4, c6, d1; a4, d2; =; 13
 3124: c4, b3, d1; a4, d2; =; 11
 3125: c4, d1, e7; a3, d2; =; 14
 3126: c4, c3, d1; c1, d2; =; 15
 3127: d3, c6, d1; b3, d2; =; 15
 3128: c2, c6, d1; a2, d2; =; 15
 3129: c2, b5, d1; a2, d2; =; 11
 3130: c2, b1, d1; a2, d2; =; 11

Mr. Beasley wrote us the following:

"As the new study columnist of *diagrammes*, I am delighted to see our award reprinted in *EG*, but *EG* 116.9929 (Bacqué after Lavaud) *EG* writes: "How far Marc Lavaud was consulted is unclear." In fact I wrote to Marc Lavaud before the award was published, and he told me that he had no objection to Guy Bacqué's version.

EG 117.9930 (Lewandowski) The demolition was reported by Guy Bacqué, not by the judge. The judge, and doubtless the composer, initially relied on the statement in Kasparian's *Domination in 2545 endgame studies* (English edition, page 385, two rooks and minor piece against queen): "As a rule, a draw is considered the outcome." Bacqué challenged this, at least in respect of the present position, and we eventually decided that he was right.

EG 117 Kutná Hora 60 (9948 - 9955) *EG* is wrong to talk about a provisional award; "její definitivní výsledek přinašíme" means "whose definitive results we present". The judge reported that 32 studies entered showed a lot of new and interesting ideas but that unfortunately they were

hard hit by unsoundness, although enough remained to honour the anniversary in good style. He commented on the honoured studies as follows:

9948 (1Pr. Matouš) "A very demanding study in which precise play by both sides eventually leads to a win for White. The succession of tries must please the solver, as must the various ideas behind the White promotions. The best study of the tourney."

9949 (2Pr. Husák and Vlasák) "Only the first move spoils this very attractive joint composition. White must avoid a positional draw, and only precise play leads to success. Very economically constructed."

9950 (3Pr. Matouš) "The play resolves into a quite incredible and most unexpected cavalry ride, which eventually leads to success. An original and most interesting study, realized in masterly style."

9951 (1HM. Slepýan) "The heart of this study lies in two echoed stalemates which are invisible in the original position. The order of moves in the two variations is forced. Extremely original."

9952 (2HM. Hlinka) "After a forcing first move, there is a long and interesting battle between the White queen and the Black army. The queen exerts her power by precise moves in an open position. Very demanding to solve."

9953 (1Com. Topko) "The realization of familiar ideas in miniature is always pleasing."

9954 (2Com. Krejčí) "Both sides display interesting although forcing play, ending in a Black promotion either to immediate stalemate or to a positional draw. The try is also interesting."

9955 (3Com. Kos) "A familiar theme ending in two mates, though Black must help a little."

Large private collections of studies

Kasparyan's collection holds some 30,000. Harold van der Heijden's currently has over 40,000 (on computer disk), and it is still growing. According to *Šachova skladba* No.46 the card collection of 86-year old František Macek of Prague totals 45,000. If we knew the precise number of studies in the all-genre collection of the late J.P.Toft of Denmark, we would be able to draw up a preliminary world ranking list! A curiosity of Macek's collection is the number of Rinck's studies in it, reported as 1564, which exceeds by over 400 the number in the Frenchman's own final volume assembling his life's work in the field.

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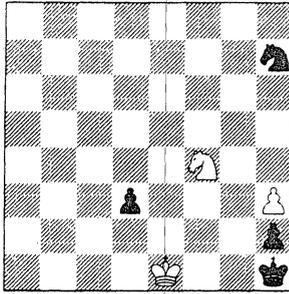
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The intention is to produce 4 issues per year. If organizational problems make the production of 4 issues in one year impossible, the subscription fees are considered as payment for 4 issues.

No 10037 V.Vlasenko (Kharkov region)
Commendation Lenin-120



e1h1 0004.12

Draw

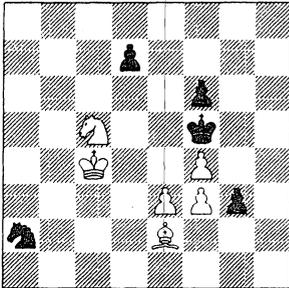
No 10037 V.Vlasenko 1.Kf2/i d2 2.Sh5 d1S+ 3.Kf1 Se3+ 4.Kf2 Sf5 5.h4 Sf8 6.Sf6/ii Sg6 7.Sg4 Sf4 8.h5 Sd3+ 9.Ke2 Sh6 10.Sxh2 Sf4, and now, not 11.Ke3? Sg2+ and 12.Kxh2 (Troitzky!), but 11.Kf3, with a drawn position.

i) 1.Sxd3? Kg2 2.Sf2 Sg5 3.h4 Sf3+ 4.Ke2 Sxh4 5.Ke1 Sf5 6.Ke2 Sg3+ 7.Ke1 Kf3 wins.

ii) 6.Sf4? Sd7 7.h5 Sf6, threatening Se4(Sg4).

"There is a resemblance to a game between resourceful grandmasters, but for a study it is somewhat dry."

No 10038 N.Danilyuk (Kherson region)
Commendation Lenin-120



e4f5 0014.33

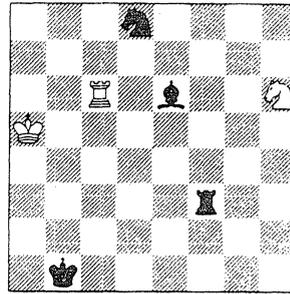
BTM, Win

No 10038 N.Danilyuk 1...d5+ 2.Kd4 Sb4 3.Bf1/i Sc2+ 4.Kd3 g2 5.Bxg2 Se1+ 6.Ke2 Sxg2 7.Kf2 Sh4 8.Kg3 Sg6 9.e4+ dxe4 10.fxe4 mate.

i) 3.e4+? Kg6 4.f5+ Kf7 5.Bf1 Sc2+ 6.Kd3 dxe4+ 7.Sxe4 g2 8.Bxg2 Se1+, and Sxg2.

"It all happens in fine style, but the guillotine's apparatus is there to see in the diagram."

No 10039 S.Mukhin (Yoshkar-Ola)
Commendation Lenin-120



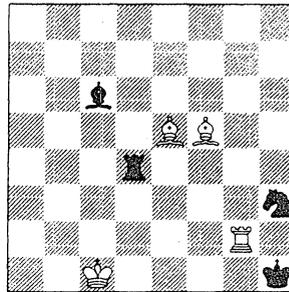
a5b1 0434.00

Draw

No 10039 S.Mukhin 1.Rb6+, and Ka1 2.Rb5 Rh3 3.Sf5 Bc4 4.Rb6 Ra3+ 5.Kb4 Rb3+ 6.Kc5 Se6+ 7.Rxe6 Bxe6 8.Sd4 Rc3+ 9.Kb4 Rc4+ 10.Ka3 Rxd4 stalemate, or Ka2 2.Kb4 Rh3 3.Rd6 Rb3+ 4.Ka4 Sb7 5.Rd2+ Ka1 6.Sf5 Sc5+ 7.Ka5 Bxf5 8.Ra2+ Kb1 9.Rb2+ Kc1 10.Rc2+ Kxc2 stalemate.

"A good effort by the young composer!"

No 10040 L.Topko (Krivoi Rog)
Commendation Lenin-120



c1h1 0453.00

Win

No 10040 L.Topko 1.Rh2+ Kg1 2.Rc2 Re4 3.Bh2+ Kh1 4.Rxc6 Re1+ 5.Kd2 Rf1 6.Bxh3 Rf2+ 7.Ke3 Rc2 8.Rc7 Rxd2 9.Rc1 mate.

"This too was already published - in 64 - *Shakmatnoe obozrenie* in another guise."

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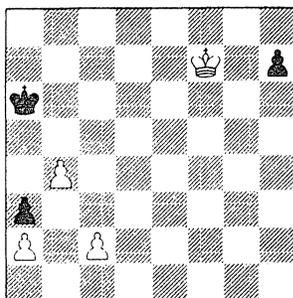
Rheinland-Pfalz and Europa-Rochade, 1991-92
This formal tourney was also known as "RP/ER-T 1991/1992"

Europa-Rochade (or Rochade Europa) is a bulky monthly, often over 70 pages, with a developing compositions section

judges: Hans Gruber and Michael Pfannkuche
provisional award published in: Rochade Europa 5/1995

It was a thematic tourney for win studies, in which the white force was restricted to pawns. In consequence there were two sections, therefore there were two tourneys running concurrently. In the first section the black force was also restricted to pawns, in the second it was not. The tourney was efficiently organised, with all entries neutralised. Boris Tummes did much analysis, accomplishing many demolitions. IGM John Nunn, Arno Zude, ChessBase, and Brian Stephenson's anticipations detection service, were also consulted to excellent effect. 90 studies were entered. After testing 11 remained in the first, and 23 in the second, section.

Pawns only section
 No 10041 S.Zakharov (St Petersburg)
 Prize RP/ER-T 1991/1992



f7a6 0000.32

Win

No 10041 S.Zakharov Arguing from stipulation-conscious and award-conscious hindsight (we know it's a unique-line win) "W must make up his mind about the black hP. It could be blocked (rather than captured) with bPh5 or bPh4 (not further on), so that with new wQb8 the looming stalemate (bKa1) can be lifted by wK unblocking hP - in this case the block occurs when bK takes on c3. Or hP could be captured at the moment when bK is on b5, after which the white commander crosses the board [like a field marshal in Europa's history ...] to adopt Polerio's posture."

1. Kf6/i Kb5/ii 2.c3 Kc4 3.Kg5 Kb5 4.Kh5/iii Kc4 5.Kh6 Kb5/iv 6.Kxh7 Kc4 7.Kg6 Kxc3 8.b5 Kb2 9.b6 Kxa2 10.b7 Ka1 11.Kf5 a2 12.Ke4 Kb1 13.b8Q+, winning.

This study well exemplifies the troublesome truth about the comprehension of knife-edge P-endings, namely that loss and win (and draw) evaluations take turn and turn about both fast and invisibly!

j) 1.Ke6? h5 2.Kf5 Kb5/v 3.c3 Kc4 4.Kf4/vi h4 5.Kf3 h3/vii 6.Kg3 h2 7.Kxh2 Kxc3. Or 1.c4? h5 2.c5 h4 3.Ke6 h3 4.c6 Kb6 5.Kd6 h2 6.c7 h1Q

drawn.

ii) h5 2.Kg5 Kb5 3.c3 Kc4 4.Kh4, with win due to a timely blockade release.

iii) This is the post-manoeuving final tempo-move that explains all!

iv) For Kxc3;, see (v).

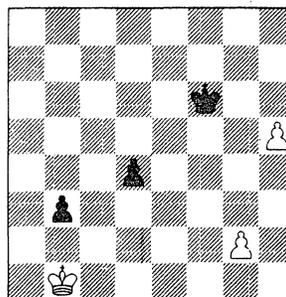
v) But not h4? 3.Kg4 Kb5 4.c3 Kc4 5.Kh3 Kxc3 (Kb5;Kxh4) 6.b5 Kb2 7.b6 Kxa2 8.b7 Ka1 9.b8Q a2 10.Qf4 Kb2 11.Qb4+ Ka1 12.Qc3+ Kb1 13.Qb3+ Ka1 14.Kg4 h3 15.Qc2 h2 16.Qc1 mate.

vi) 4.Kg5 h4 5.Kxh4 Kxc3 drawn,

vii) Kb5? 6.Kg2 Kc4 7.Kh3.

"Two different win ideas cleverly combine to defeat the ancient draw of RP against Q. We were particularly impressed by the play over the whole board and the refutation of 1.Ke6?"

No 10042 Leopold A.Mitrofanov (St Petersburg)
 1st honourable mention RP/ER-T 1991/1992



b1f6 0000.22

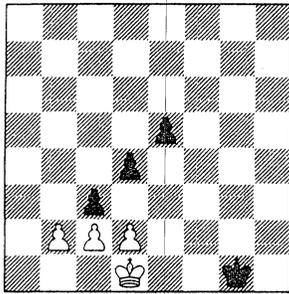
Win

No 10042 Leopold A.Mitrofanov 1.Kb2 Kg5 2.g4 d3 3.Kc3 b2 4.Kxb2 Kxg4 (Kf4;Kc1) 5.h6 Kf3 6.h7 d2 7.h8Q d1Q 8.Qh5+ and 9.Qxd1 wins.

"A pretty miniature in which the washed out spear check is combined with the fine delayed capture of bP. This is not pure ('allerdings nicht zweckrein') in that W not only avoids the d1 check but speeds up wK's march to d1 (after bKf4;)."

The late Mitrofanov entered no fewer than 26 studies, 11 of them jointly with other composers. He knew he was ill and part of him suspected he was dying. In his last months (viii-x92) he sent AJR letter after letter, enclosing a whole flurry of old and new material, which he hoped would appear in book form.

No 10043 Vladimir V. Nikitin (Russia)
2nd honourable mention RP/ER-T 1991/1992



d1g1 0000.33

Win

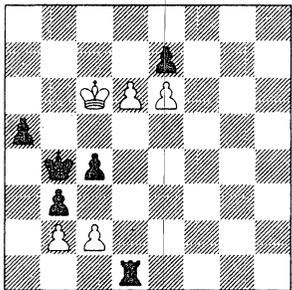
No 10043 Vladimir V. Nikitin 1.bxc3/i dxc3/ii 2.d4! exd4 3.Ke2 Kg2 4.Kd3 Kf3 5.Kxd4 wins.

i) Bl was threatening to capture on b2 or on d2. The obvious try 1.b4? fails to cxd2 2.Kxd2 Kf2 3.Kd3 Kf3 4.b5 e4+ 5.Kxd4 e3 6.b6 e2 7.b7 e1Q 8.b8Q Qd2+, and if, in this, 2.Ke2 d1Q+ 3.Kxd1 Kf2, or 2.b5 Kf2 3.b6 e4, drawing every time.

ii) Renewing the other threat - namely, with cxd2; to mobilise the eP.

Black-with-pieces section

No 10044 David Gurgenzidze (Georgia)
1st prize RP/ER-T 1991/1992



c6b4 0300.44

Win

No 10044 David Gurgenzidze 1.c3+/i Ka4 2.dxe7/ii Rd8 3.Kc7/iii Ra8/iv 4.Kd7 Ra7+ 5.Ke8/v Rb7 6.Kf7/vi Rb5 7.e8S/vii Rf5+/viii 8.Sf6 Kb5 9.e7 Re5 10.e8Q+/ix Rxe8 11.Sxe8/x a4 12.Sd6+ Kc5 13.Se4+ Kb5 14.Sd2 a3 15.bxa3 b2 16.Ke6 Ka4 17.Kd5 Kxa3 18.Kxc4 wins.

i) 1.dxe7? bxc2 2.e8Q Kb3 3.Qb8+ Ka2 4.e7 Re1 draw.

ii) 2.d7? Rd6+ 3.Kc5 (Kc7,Rc6+;) Rd2 4.Kc6, repetition.

iii) 3.Kc5? Rd7 4.e8R Rd8 5.Re7 Rd7, drawn.

iv) If, for instance, 3...Rh8, then 4.Kd7, threatening promotion, wins.

v) The only way to escape bR's attentions. The e5 route is ruled out by Kb5;. But now promotion is threatened on e8 with check, when aP's advance comes too late. But Bl has another resource - stalemate!

vi) 6.Kf8? fails after the reply Rb5: 7.e8S Rf5+ 8.Kg7 Rf2 9.e7 Rxb2 10.Sf6 Re2. Or 7.Ke8 Rd5 8.Kf7 Rf5+ 9.Kg6 Rb5 10.e8S Re5 11.Sc7 Re2 12.Kf7 Rxb2 13.e7 Rf2+ and Re2, drawing. Or, in this, 10.Kf6 Rb8 11.Kf7 Rb7. This demonstrates that the position with bRb7 and wKf7 is one of reciprocal zugzwang: after 12.Ke8 Kb5, Bl is quick enough with his aP. For the R-promotion, see (vii).

vii) 7.e8R? Rf5+ 8.Kg6 Rf2 9.e7 Rxb2 10.Rb8 Re2 11.e8Q+ Rxe8 12.Rxe8 b2 13.Rb8 Ka3 14.Kf5 Ka2 15.Ke4 b1Q+ 16.Rxb1 Kxb1 17.Kd4 a4 18.Kxc4 a3, and Bl wins.

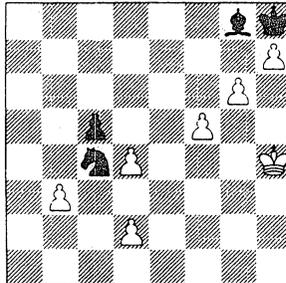
viii) If Re5, then not 8.Sc7? Re2 9.e7 Rxe7+ 10.Kxe7 stalemate, but 8.e7 Re2 (Kb5;Sc7+) 9.Sf6 Kb5, and we are back in the main line.

ix) 10.Sd5? Rxe7+ 11.Sxe7 a4 wins. Or 10.Se8? Kc6 11.Sg7 Rxe7+ wins.

x) 11.Kxe8? a4 12.Se4 a3 13.bxa3 Ka4 14.Sd2 Kxa3 15.Sxc4+ Ka2 16.Sd2 Kb2 17.c4 Kc3 draw.

"By some margin the tourneys' best entry - and in a very natural position. The unusually lengthy play is spiked with an assortment of finesses, among which the surprising reci-zug after the self-pin (6.Kf7!) and the 11.Sxe8! move stand out. The latter illustrates the paradox that on occasions S can reach e4 from e8 faster than from f6. Besides, two interesting stalemates arise, with bR pinned, after 3.Kc5 Rd7 4.e8Q, and 6...Rb5 7.c8Q. Absolutely worthy of the first prize."

No 10045 Alimkul T. Botokanov (Kirgizia)
2nd prize RP/ER-T 1991/1992



h4h8 0033.61

BTM, Win

No 10045 Alimkul T. Botokanov Bl is faced with two threats of capture, and the fP's impending advance. 1...Sxd2 2.dxc5/i Sxb3/ii 3.c6 Sd4/iii 4.f6 Sxc6 5.f7 Se7 6.hxg8Q+/iv Sxg8 7.f8R wins,

not 7.f8Q? stalemate, nor 7.f8B Sf6. A continuation: 7.f8R Kg7 8.Rd8 Kh6 (Se7;Rd7) 9.Kg4 (orRd6), avoiding giving stalemate by 9.Rxg8?

i) Not 2.hxg8Q+? Kxg8 3.dxc5 Sxb3 4.c6 Sd4 5.f6 Sxc6 6.Kg5 Sd8 draws. Nor 2.f6? Sf3+ 3.Kh5 Sxd4 4.Kh6 Sf5+ 5.Kg5 Sd6, but not for Bl here Sd4? 6.f7 Bxf7 7.gxf7 Se6+ 8.Kf6 Sf8 9.Ke7 Sg6+ 10.Ke8 Kxh7 11.f8Q Sxf8 12.Kxf8 wins.

ii) Bxh7 3.c6 Se4 4.c7 Sd6 5.gxh7 Kxh7 (Sxf5+;Kg5) 6.Kg5 Kg7 7.b4 Kf7 8.b5 Sc8 9.f6 Sb6 10.Kf5 Sc8 11.Ke5 wins.

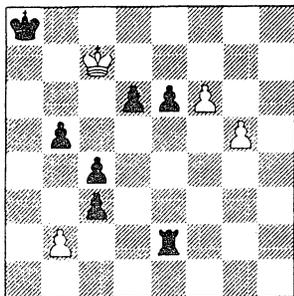
iii) Bc4; does save bB, but fails to save the draw 4.f6 Sd4 5.c7 Ba6 6.Kg5.

iv) 6.Kg5? Bxf7 7.gxf7 Sg6 8.Kxg6 stalemate.

"Patience is a virtue, and chess is often a game of patience. W must wait 5 moves before garnering on g8. Then W must abstain more than once - by underpromotion and not capturing, so as to avoid stalemate. Virtue gets its reward!"

No 10046 L.Mitrofanov

1st honourable mention RP/ER-T 1991/1992



c7a8 0300.35

Win

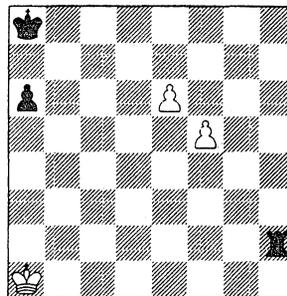
No 10046 L.Mitrofanov 1.g6/i, with: cxb2 2.f7 Rf2 3.Kb6 b1Q 4.g7+ wins, or c2 2.g7 Rg2 3.Kc6 c1Q 4.f7 Ka7 5.f8Q, and proving the win might entail Rxb2 6.Qc8 Qh1+ 7.Kc7 Qa8 8.g8Q, or Qxb2 6.Qe7(Qf7)+ Ka6 7.Qc7 Qd4 8.Qb7+, or Qg5 6.Qf7+ Ka6 7.Qb7+ mating.

i) 1.bxc3? Rf2 2.Kxd6 b4 wins, 3.Ke5 b3 4.g6 b2 5.g7 b1Q 6.g8Q+ Qb8+.

"W has to delay his own decision, which *pawn* to promote, until Bl has made his parallel decision, on which *square* to promote! W then proceeds to force an obstruction by bR on one of bQ's diagonals, to create a safe square for wK. This attractive combination is surrounded by pretty variations."

No 10047 D.Gurgenidze

2nd honourable mention RP/ER-T 1991/1992



a1a8 0300.21

Win

No 10047 D.Gurgenidze "This study is built on the known fact that the GBR class 1300.01 (with bPa6) is won only if wK can play to a5 or if wK can break through via c7 and c8. Bl's strategy is therefore to use bR as barrier (passive on b-file) or barrage (of active checks)."

1.f6/i Ka7 2.f7 Rf2 3.Kb1 Rf6/ii 4.Ka2(Kb2) Rf3 5.Kb2(Ka2) Rf6 6.Kb3/iii Rf4/iv 7.Kc3 Rf6 8.Kb4 Rf5 (Kb7,e7) 9.Kc4 Rf6 10.Kd5 Rf1 11.Kd6 Rf2 12.Ke7 wins.

i) 1.e7? Re2 2.f6 Ka7 3.f7 Re1+ 4.Kb2 Re2+ 5.Kb3 Re3+ 6.Kb4 Re4+ 7.Kc5 Rxe7 8.f8Q Rb7 draw.

ii) Kb6(Kb7) 4.e7 Rf1+ 5.Kb2 Rf2+ 6.Kb3 Rf3+ 7.Kc4 Rf4+ 8.Kd5 Rxf7 9.e8Q wins, declares the database oracle.

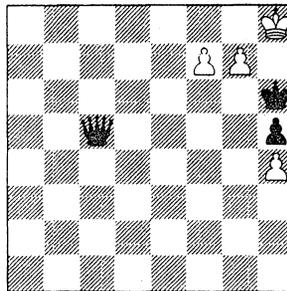
iii) 6.Ka3? Rf3+ 7.Kb4 Rf6 8.Kb3. More than one path through the jungle, leads to Rome, but some are longer than others!

iv) Rf3+ 7.Kc4 Rf6 8.Kd5 wins.

"Right and wrong choice of key is explained at the end, where wK reaches (or fails to reach) the promotion aid square."

No 10048 Ivan M.Bondar (Belarus)

1st commendation RP/ER-T 1991/1992



h8h6 3000.31

Win

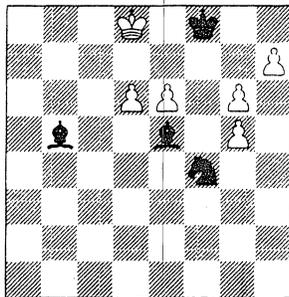
No 10048 Ivan M.Bondar 1.f8Q Qe5 2.Qe7/i Qxe7 3.g8S+ Kg6 4.Sxe7+ Kf6 5.Sd5+ Ke5 6.Se3 Kf4 7.Sg2+, with Kg3 8.Kg7 Kxg2 9.Kg6 Kg3 10.Kxh5+ winning.

i) 2.Qg8? Qf5 wins. 2.Qf7, only delays (wastes time) Qe8+ 3.Qf8/ii Qe5 4.Qe7 and so on.

ii) 3.Qxe8 stalemate? 3.g8S+? Qxg8+ stalemates.

"Both sides offer the Q. After a charming tactical affray the wS (promoted) protects the last pawn, in the nick of time - though it is known from B.J.Vleurman, 1934."

No 10049 Pavel M.Arestov (Russia)
2nd commendation RP/ER-T 1991/1992



d8f8 0063.50 Win

No 10049 Pavel M.Arestov 1.h8Q+/i Bxh8 2.e7+ Kg8/ii 3.d7Se6+ 4.Kc8 Bxd7+/iii 5.Kxd7 Sg7 6.Kd8/iv Se6+ 7.Kc8 (Kd7? Sg7;) Sg7 8.Kd7 wins.

i) 1.e7+? Kg7 2.d7 Se6+ 3.Kc8 Ba6 mate. So wB is drawn aside.

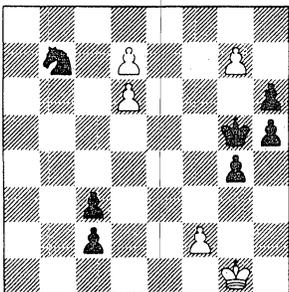
ii) Kg7 3.d7 Se6+ 4.Kc8 Bxd7+ 5.Kxd7 wins.

iii) Ba6+ 5.Kb8 Be5+ 6.Ka7 wins.

iv) 6.Kc7? Se8+ 7.Kd8 Sd6 8.Kd7 Be5 drawn.

"After the blunting of the bSe6+ through the sidelining of bB, wK undertakes a triangulation to bring bB into the enchanting final position."

No 10050 L.Mitrofanov and Viktor A.Razumenko
3rd commendation RP/ER-T 1991/1992



g1g5 0003.45

Win

No 10050 L.Mitrofanov and V.A.Razumenko 1.g8Q+ Kh4 2.Kh2/i c1Q 3.d8Q+ Sxd8/ii 4.Qxd8+ Qg5 5.Qxg5+ hxg5 6.d7 c2 7.d8Q c1Q 8.Qd3 Qf4+ 9.Qg3+ Qxg3+ 10.fxg3 mate.

i) Not 2.Kg2? c1Q 3.d8Q+ Sxd8 4.Qxd8+ Qg5 5.Qxg5+ hxg5 6.d7 c2 7.d8Q c1Q 8.Qd3 Qc6+ 9.Kh2 Qf3 wins. Nor 2.d8Q+?, when Kh3? 3.gQg5 hxg5 4.Qxg5 wins, but Sxd8 3.Kh2 Sc6 draws.

ii) Qg5 4.gQxg5+ hxg5 5.Qe7 wins.

"P-sac minimal mate after 5 Q-sacrifices. A humorous representation of 'Peace after the Storm'." (The phrase tugs at the hearts of those who recall the late Leopold's enthusiasm for swimming among high waves in stormy seas. AJR)

Wola Gulowska - '94/II.

This international formal tourney was judged by A.Lewandowski (Poland)

Provisional award signed by: Lewandowski, 24iv95.

21 studies by 10 composers (Milenko Dukic entered 8) from 6 countries, 3 published in the provisional award.

Confirmation period: 3 months (presumably from 31v95), send claims to:

Dom Kultury

Pomnik Czynu Bojowego Kleeberczyk6w
28-481 Wola Gulowska

POLAND

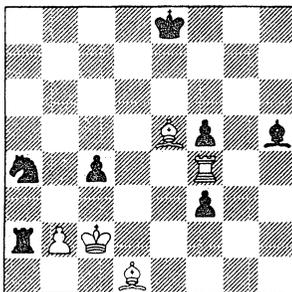
Text of award: "... entry from IGM Rusinek was faulty, lowering the overall standard ...".

Judge: 21 studies were entered. Unfortunately the general level was very low, with straightforward, even primitive, combinations involving many captures. Such are far removed from the artistic criteria of modern studies. Several sound studies made use of well known and well worked ideas. Two promising studies were unsound, the composers ignoring obvious continuations. ... My award is restricted to three studies.

Remarks: Wola Gulowska is a town.

Translation assistance: Jerzy Rosankiewicz.

No 10051 Jan Timman and Jan van Reek
(Holland)
prize Wola Gulowska - '94/II



c2e8 0453.13

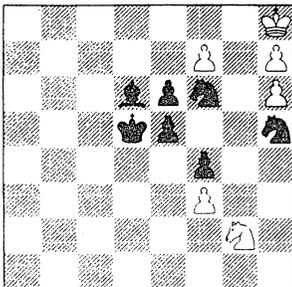
Win

No 10051 Jan Timman and Jan van Reek 1.Kb1/i
Sxb2 (Sc3+;Bxc3) 2.Bxf3/ii Bf7/iii 3.Kxa2 c3+
4.Kb1/iv Sd3 5.Rxf5, with:

- Bg6 6.Bh5 (Rg5? Sxe5+) Sxe5 7.Kal/v wins, or
c2+ 6.Kxc2 Bg6 7.Bh5/vi Sxe5 8.Kc3 wins.
i) 1.Bxf3? Bxf3 2.Kb1 c3 draw.
ii) 2.Kxa2? Sxd1 3.Rxf5 f2 draw. 2.Bxb2? Ra5.
iii) Bxf3 3.Kxa2 Sd3 4.Rxf3 Sxe5 5.Re3 and
Black loses material.
iv) 4.Kal(Ka3)? Sd3 5.Rxf5 c2 draw.
v) 7.Ka2? Bf7+ and Sg6.
vi) 7.Bc6+? Ke7 8.Bd6+ Kxd6 9.Rf6+ Kc5
10.Rxg6 Sb4+.

"Sharp opening play leads to a fascinating
position of dynamism involving mutual pins and a
beautifully subtle point to wK's movement. The
duplication in the form of an echo is noteworthy.
A very good study with extensive play on both
sides."

No 10052 Alain Pallier (France)
honourable mention Wola Gulowska - '94/II



h8d5 0037.43

Draw

No 10052 Alain Pallier 1.f8Q/i Bxf8 2.Sxf4+/ii
Kd6 3.Sxh5 (S-? Bxh6;) Ke7/iii 4.Sxf6/iv Kf7
5.Sd7(Sg4)/v Bd6/vi 6.Sf6, with:
e4/vii 7.fxe4/viii Be5stalemate, or

Ba3(Bc5) 7.Se4 Be7/ix 8.f4 exf4 (Kf8;fxe5)
9.Sg5+ Bxg5 stalemate.

i) 1.Sxf4+? Sxf4 (exf4;f8Q) 2.f8Q Sg6+ 3.Kxg7
Bxf8+ 4.Kxg6 Sxh7 5.Kxh7 e4 6.fxe4+ Kxe4
7.Kg6 Bxh6 wins.

ii) 2.Sh4? Bxh6 3.Sf5 Bg7+ 4.Sxg7 Sxg7 5.Kxg7
Sxh7 6.Kxh7 e4 wins.

iii) Bxh6 4.Sxf6 for 5.Kg8. Or Sxh5 4.Kg8 Sf6+
5.Kxf8 Sxh7+ 6.Kg7 Sg5 7.Kg6 and White wins!

iv) 4.Sg7? Kf7 5.Sxe6 Bxh6 6.Sd8+ Kg6 7.Se6
Sxh7 wins.

v) 5.Se4(Se8)? Bxh6 wins. 5.Sg8? e4 6.fxe4 e5,
and 7.Sf6 Bxh6 8.Sh5 (Se8;Kf8) Bf8 wins, or
7.Se7 Bxh6 8.Sf5 Bg5 (Bf8+? S+) 9.Sh6+
(Sd6+;Kf8;) Kf8 10.Sg8 Bh4 mates.

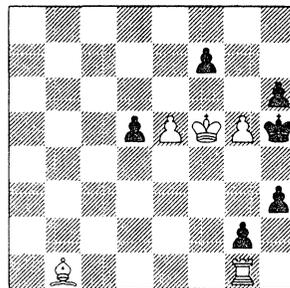
vi) Bxh6 6.Sxe5+ Kf8 (Kf6? Sg4+) 7.Sd7+ draw
vii) Kxf6 7.Kg8. Be7 7.Sd7 Bd6, or Bf8 7.Sg4
Bd6, positional draw.

viii) 7.Sxe4? Be5+ 8.Sf6 Bxf6 mate. 7.f4? Bxf4
8.Sh5 Bxh6 9.S- Bg7 mate. 7.Sh5? e3, and
Black wins.

ix) Bcl(Be3) 8.f4 Bxf4 (Bb2(Bd4);Sg5+) 9.Sg5+
Bxg5 stalemate.

"Black's mating threats are insufficient to cope
with all the emerging stalemate defences. Despite
the undoubtedly rich content the study has fun-
damental shortcomings: wK's confined position
right at the start; somewhat banal stalemates, in
particular an ugly and uneconomical stalemate in
the second variation; a dual at move 5, albeit with
no significant bearing on the essential play, but
spoilng the overall effect."

No 10053 Andrzej Jasik (Poland)
commendation Wola Gulowska - '94/II



f5h5 0110.25

Draw

No 10053 Andrzej Jasik 1.Be4/i dxe4 2.gxh6
Kxh6 3.e6 fxe6+ 4.Kg4 h2 5.Rxg2 h1Q 6.Rh2+
Qxh2 stalemate.

i) 1.gxh6? Kxh6 2.Be4 h2 3.Rxg2 h1Q 4.Rg6+
fxg6+.

"A very ordinary stalemate study redeemed by
black counterplay. The interest resides solely in
the reason why White sheds his men a particular

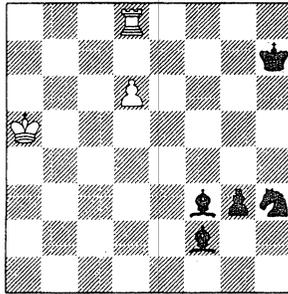
sequence."

Molodoy leninets, 1988.

This informal tourney was probably one of the intermittent series of Birnov MTs. 17 of the 48 received studies by 18 composers were published.

No 10054 M.Gromov (Vladimir) and V.Kozyrev (Morozovsk)

1st prize Molodoy leninets, 1988



a5h7 0163.11

Draw

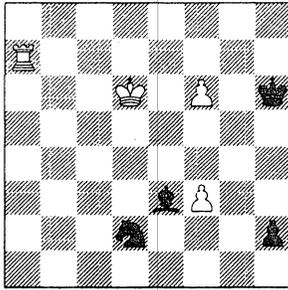
No 10054 M.Gromov and V.Kozyrev 1.d7/i g2 2.Rh8+ Kxh8 3.d8Q+ Kg7 4.Qe7+/ii Kg6 5.Qe6+ Kg5 6.Qxh3 Be1+ 7.Kb5 Be2+ 8.Ka4 g1Q/iii 9.Qe3+ Qxe3 stalemate.

i) 1.Rh8+? Kxh8 2.d7 Be1+ 3.Ka6 (Kb5;Bc6+;) Be2+ 4.Kb6 g2 5.d8Q+ Kg7, when B1 wins, seeing that bK escapes the checks.

ii) 4.Qd7+? Kf6 5.Qxh3 Be1+ 6.Ka4 Bd1+, and g1Q.

No 10055 N.Daniliuk (Kherson region)

2nd prize Molodoy leninets, 1988



d6h6 0133.21

Draw

No 10055 N.Daniliuk 1.f7/i Kg7 2.Ke7 Bc5+ 3.Ke8 Bf8 4.Ra1 Sxf3 5.Rh1zz Bd6 6.Rd1 Sd2/ii 7.Rh1 Sf3 8.Rd1 Bc5 9.Rc1 Bb4 10.Rb1 Ba3 11.Ra1 Bf8 12.Rh1zz, positional draw, B1 being in zugzwang.

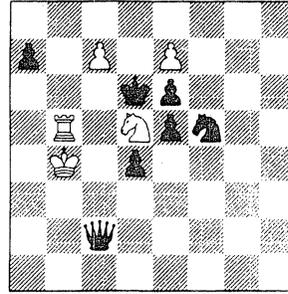
i) 1.Ra1? Kg6 2.Ke6 Sxf3 3.Rh1 Bh6 4.f7 Bf8 5.Kd5 Kf5, and 6.Kc4 Kf4 7.Kd5 Kg3, or 6.Kc6 Ke6 7.Kb5 Kxf7 wins.

ii) David Blundell: Sd4 7.Rh1 Se6 8.Kd7 draw.

"A very tempting try, everlasting pursuit of organically pinned bB, and an engaging final reci-zug. Interesting, and sticks in the mind."

No 10056 A.Maksimovskikh and V.Shupletsov (Kurgan region)

3rd prize Molodoy leninets, 1988



b4d6 3104.24

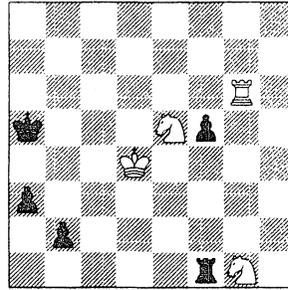
Win

No 10056 A.Maksimovskikh and V.Shupletsov Perpetual check ensues if W tries queening. 1.e8S+ Kd7 2.eSf6+ Kd6 3.Se4+ Qxe4 4.c8S+ Kc6 5.Sxa7+ Kd6 6.Sc8+ Kc6 7.Rb6+ Kxd5 8.Rd6+ Sxd6 9.Se7 mate.

"Smile, everyone! Mate with the last piece, and that one a promoted knight!"

No 10057 P.Arestov (Moscow region)

1st honourable mention Molodoy leninets, 1988



d4a5 0402.03

Win

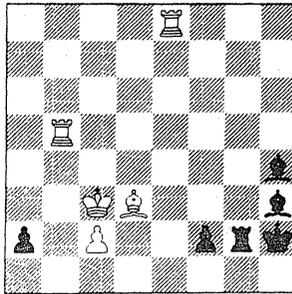
No 10057 P.Arestov 1.Sc4+ Ka4/i 2.Se2 Rd1+/ii 3.Kc5 b1Q 4.Ra6+ Kb3 5.Rxa3+ Kc2 6.Rc3 mate.

i) Kb4 2.Rb6+ Ka4 3.Se2 Rd1+ 4.Kc5 wins.

ii) b1Q 3.Sc3 Kb3 4.Rb6 Kc2 5.Sxa3 wins. Or b1S 3.Rb6 Re1 4.Kc5.

"Two active self-blocks contribute to this great picture mate."

No 10058 V.Vinichenko (Novosibirsk)
2nd honourable mention Molodoy leninets, 1988



c3h2 0570.12

Draw

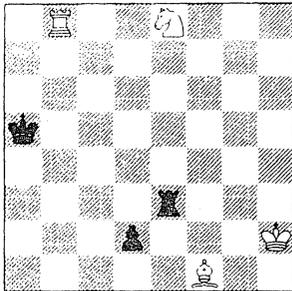
No 10058 V.Vinichenko 1.Kb2 f1Q 2.Bxf1 Rxc2+ 3.Ka1 Bf6+ 4.bRe5 Bxf1 5.Rh8+ Kg3 6.Rh3+ Kf4/i 7.Rf3+ Kxe5 8.Rxf1 Bg7 9.Rg1 Bh8 10.Rh1 Bg7 11.Rg1 Bf6 12.Rf1 Rh2 13.Rf2 Ke6+ 14.Rxf6+ Kxf6 stalemate.

i) Bl's plan clarifies: to capture wRe5 and then for bK to step aside with check. It seems that the desperado wR's suicide mission is doomed.

"An expressive and impetuous study."

No 10059 D.Gurgenidze (Georgia)

3rd honourable mention Molodoy leninets, 1988



h2a5 0411.01

Win

No 10059 D.Gurgenidze 1.Sd6 d1Q 2.Sc4+ Ka4 3.Sb2+ Ka3 4.Sxd1 Re1 5.Ra8+ Kb4 (Kb3;Bb5) 6.Sf2 Rxf1 7.Kg2, with a surprising domination of bR.

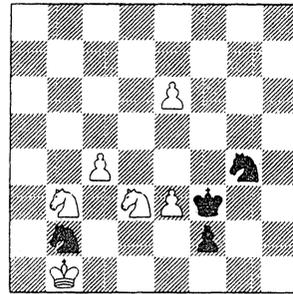
No 10060 G.Amiryan 1.Sd2+/i Kxe3 2.Sxf2 Sxc4 3.e7, with:

Sd6 4.Sc4+ Kxf2 5.Sxd6 Sf6 6.Se4+, or Sf6 4.Sg4+ Kxd2 5.Sxf6 Sd6 6.Se4+, winning.

i) 1.Sxf2? Sxc4 2.Sxg4 Kxg4 3.e7 Sd6 4.Kc2 Kf5 5.Sd4 Kf6 6.Sc6 Kxe6 7.Kd3 Kd7 drawn.

"Witty enough, but it does not quite come off."

No 10060 G.Amiryan (Erevan)
4th honourable mention Molodoy leninets, 1988

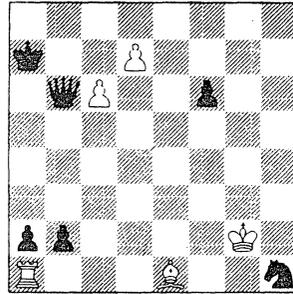


b1f3 0008.31

Win

No 10061 A.Zholobov (Volgograd)

Sp.HM Molodoy leninets 1988 (for a beginner)



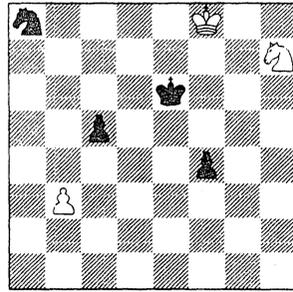
g2a7 3113.23

Draw

No 10061 A.Zholobov 1.Rxa2+ Kb8 2.Rxb2 Qxb2+ 3.Kxh1 Qb6 4.d8Q+ Qxd8 5.c7+ Qxc7 6.Bg3 Qxg3 stalemate.

No 10062 S.Abramenko (Volzhsky)

Special prize Molodoy leninets, 1988



f8e6 0004.12

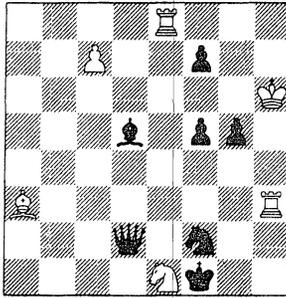
Draw

No 10062 S.Abramenko 1.Sg5+ Kf5 2.Sh3/i f3 3.Ke7 Sb6 4.Kd6 c4 5.bxc4 Sxc4 6.Kd5 Se3+ 7.Kd4 Sd1 8.Sf2 Sxf2 9.Ke3 draw.

i) 2.Sf3? Sc7 3.Ke7 Sb5 4.Sd2 Ke5 5.Kd7 Sd4 wins.

"An interesting miniature with a surprise wS sacrifice."

No 10063 A. Kazantsev (Moscow)
Spec.Hon.Men. Molodoy leninets, 1988



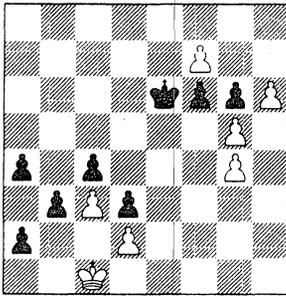
h6f1 3244.13

Win

No 10063 A. Kazantsev 1.c8Q g4+ 2.Kh5 gxh3
3.Qa6+ Kg1 4.Rg8+ Sg4 5.Rxg4+ fxg4 6.Bc5+
Kh2 7.Qf1 Bg2 8.Sf3+ gxf3/i 9.Qg1+ Kg3
10.Qf2+ Qxf2 11.Bd6 mate.
i) Kg3 9.Sxd2 Bxf1 10.Sxf1+ Kf3 11.Kh4 g3
12.Kxh3 g2 13.Sh2+ wins.

"Romantic, fantastic. The sci-fi author is true to himself in his composing guise too!"

No 10064 M.Zinar (Odessa region)
1st commendation Molodoy leninets, 1988



c1e6 0000.67

Win

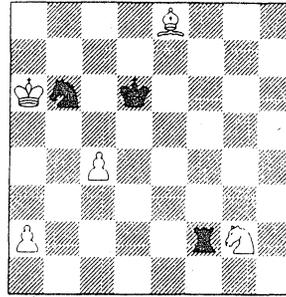
No 10064 M.Zinar 1.f8S+/i Kf7 2.Kb2 a3+ 3.Ka1
Kxf8/ii 4.gxf6 Kg8 5.g5 Kh8 6.f7 Kh7 7.f8S+/iii
wins.

i) 1.Kb2? Kxf7 2.gxf6 Kxf6 drawn.

ii) The first phase is finished. Now we have the second phase - which happens to be the same, ie also a P-ending!

iii) David Blundell: "The main interest here is why 7.f8B fails. The obvious plan is to cover a1 with wB, thereby freeing wK. But wPc3 rules out this exchange of roles!"

No 10065 A.Dzhalilov (Uzbekistan)
2nd commendation Molodoy leninets, 1988



a6d6 0314.20

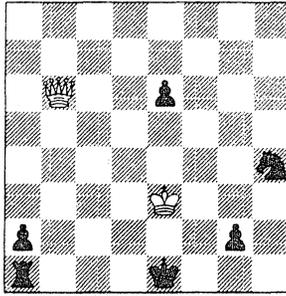
BTM, Draw

No 10065 A.Dzhalilov 1...Sa8 2.c5+ Kxc5 3.Se1
Re2/i 4.Sd3+ Kd4 5.Ba4 Rxa2/ii 6.Sb4 Rxa4+
7.Kb5 Sb6 8.Sc6+ and 9.Kxb6 with a draw.

i) Rf6+ 4.Kb7 Re6 5.Sd3+ Kd4 6.Bb5 Rb6+
7.Kxa8 Rxb5 8.Sc1 draw.

ii) Re6+ 6.Kb7 Kxd3 7.Bb5+ Kd4 8.Kxa8 Kc5
9.a4 Kb6 10.Kb8 drawn.

No 10066 A.Chebotarev (Volgograd)
3rd commendation Molodoy leninets, 1988



e3e1 1303.03

Win

No 10066 A.Chebotarev 1.Qb4+ Kf1 2.Qf4+ Kg1
3.Qf2+ Kh2 4.Qxh4+ Kg1 5.Kf3 Rf1+ 6.Kg3 Rf2
7.Qd4 Kh1 8.Qh8+ Kg1 9.Qa1+ wins.

"Neat co-ordination between wK and wQ, but play is too forced."

No 10067 V.Anufriev 1.Qb1 Kh2/i 2.Be5 Kh1
3.Qc1/ii Qc6 4.Bc3 Qb6/iii 5.Bd4 Qd6/iv 6.Kf2
Kh2 7.Be5 Qxc5 8.Qh6 Qh5 9.Qxh5 mate.

David Blundell has nobly reconstructed this from a corrupted source. He supplies notes (i), (ii) and (iii).

i) Qa7 2.Bd4 Qc7 3.Kf2+ Kh2 4.Be5+ Qxe5
5.Qa7+ mates.

ii) 3.Qe1? Qe4 4.Qxe4 stalemate. 3.Qd1? Qd5
4.Qc1 Qxe5 5.Qh6+ Qh2 draw. Or 3.Qa1? Qb6
draw.

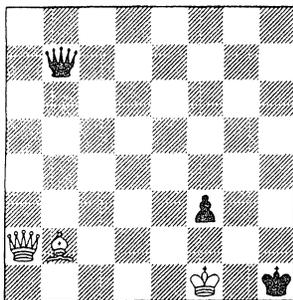
iii) Kh2 5.Qf4+ Kh3 6.Qf5+ mates.

iv) Qg6 6.Kf2+ Kh2 7.Qf4+ Kh3 8.Qf3+ Kh4 9.Bf6+ wins.

"Miniature with classic force and no pretensions."

No 10067 V.Anufriev (Tula)

4th commendation Molodoy leninets, 1988



f1h1 4010.01

Win

Birnov MT of Molodoy Leninets, 1989

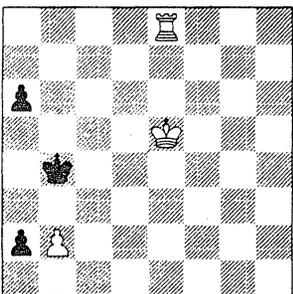
This informal tourney was judged by A.Milokumov (Volograd).

Text: "Almost all participants contributed as it were towards repaying a debt to the Volgograd master in that they gave examples of one of his characteristics, namely the art of improvisation, in that something of their own was added to what was already known. The tourney was a success in that only two entries were found to be defective, and one anticipated."

11 studies from 11 composers out of 18 entries published.

No 10068 P.Vasiliev (Volograd)

Prize Birnov MT of Molodoy Leninets, 1989



e5b4 0100.12

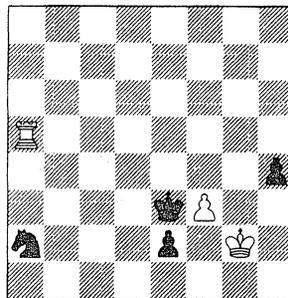
Draw

No 10068 P.Vasiliev 1.Rb8+ Ka4 2.Rb6 a5 (Ka5;Rb3) 3.Kd6 a1Q 4.Kc7 Qh1 5.Kb8 Qh7 6.Rb7 Qe4 7.Ka7 draw.

"The solution to this subtle windfall is totally convincing to the solver. Without question the best entry. A shining example of the artistic endgame!"

No 10069 N.Daniliuk (Kherson region)

HM Birnov MT of Molodoy Leninets, 1989



g2e3 0103.12

BTM, Draw

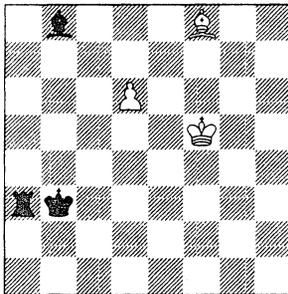
No 10069 N.Daniliuk 1...h3+ 2.Kh2/i Kf4/ii 3.Ra4+ Kxf3 4.Ra3+ Kf4 5.Ra4+ Kf5 6.Ra5+ Kf6 7.Ra6+ Ke7 8.Ra7+ Kd6 9.Ra6+ Kd5 10.Ra5+ Kd4 11.Ra4+ Kd4 12.Ra3+ Sc3 13.Ra1 Sd1 14.Ra3+ Kd4 15.Ra4+ Kd5 16.Ra5+ Kd6 17.Ra6+ Ke7 18.Ra7+ Kf6 19.Ra6+ Kf5 20.Ra5+ Kf4 21.Ra4+ Kf3 22.Ra3+ Se3 23.Ra1 Sc2 24.Rg1, draw.

i) "This is something new."

ii) "The downside to all this is that the unnatural 2...Kf4, instead of the natural 2...Ke3, purely for dual avoidance reasons, does nothing to alter the finale and subsequent play, which drags on and on. The impression is significantly lessened."

No 10070 V.Lovtsov (Magadan)

1st Comm. Birnov MT of Molodoy Leninets 1989



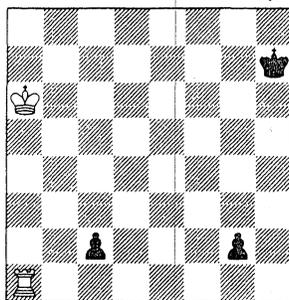
f5b3 0340.10

Draw

No 10070 V.Lovtsov 1.d7 Ra5+ 2.Ke6 Bc7 3.Be7 Ra8 4.Kd5 Ba5 5.Kc6 Rb8 6.Bd6 Rb6+ 7.Kc5 Ra6 8.Be7 Ra8 9.Kc6 Rg8 10.Kb5 Bc7 11.Kc6 Ba5 12.Kb5 Ra8 13.Kc6 Kc4 14.d8Q Bxd8 15.Kb7 draw.

"The play may be new, but somehow it still lacks interest."

No 10071 I.Galushko (Volgograd)
2ndComm. Bimov MT of Molodoy Leninets 1989



a6h7 0100.02

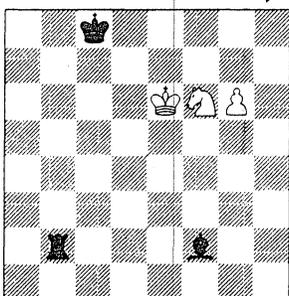
Win

No 10071 I.Galushko 1.Kb5/i Kg6 2.Kc4 Kf5
3.Kd3 Kf4 4.Ke2 Ke4 5.Re1 Kd4 6.Kd2 wins.

i) 1.Rg1? Kh6 2.Kb5 Kh5 3.Kc4 c1Q+ 4.Rxc1
Kg4 5.Kd3 Kf3 draw.

"Adds something to Réti."

No 10072 V.Kondratev (Ivanovsk region)
3rdComm. Bimov MT of Molodoy Leninets 1989



e6c8 0331.10

Win

No 10072 V.Kondratev 1.g7 Rb6+ 2.Ke5 Bd4+
3.Kxd4 Rd6+ 4.Kc5 Rd8 5.Kc6 Kb8 6.Sd7+ and
7.Sf8, winning.

"Satisfying to solve."

PHÉNIX, 1988-90

This informal tourney was judged by Pauli
Perkonoja (Finland).

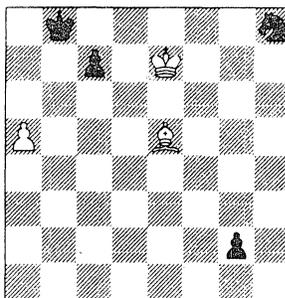
Provisional award published in PHÉNIX 28, sup-
plement, 1995(?). Text: "The level of competing
studies was satisfactory, although I should have
liked to see one or two masterpieces, missing
here, in my opinion. My award may be
over-generous, in that I decided to honour 11
studies in all: one prize, three honourable men-
tions, and seven grouped commendations."

20 studies published, 2 demolished by solvers, 3
more by the judge.

No reason for long delay given. Award itself

carries no date.

No 10073 Marc Lavaud (France)
Prize PHÉNIX, 1988-90



e7b8 0013.12

Draw

No 10073 Marc Lavaud 1.Bh2/i Sg6+/ii 2.Ke6/iii
Sf4+/iv 3.Kd7 c5/v 4.Kd6/vi c4/vii 5.Ke5 c3/viii
6.Kxf4 c2 7.Ke3+ Kb7 8.Kd2 draw.

i) 1.Bd4? Sg6+ 2.Ke6/ix Sf4+ 3.Kd7 Se2 4.Be3
g1Q 5.Bxg1 Sxg1 6.Kc6 Sf3 7.a6 Sd4+ 8.Kc5
Se6+ 9.Kd5 c5 wins.

ii) Kb7 2.Bg1/x, and Kc6 3.Kf6 Kb5 4.Kg5, or
Sg6+ 3.Kd8 c6 4.Kd7 Se5+ 5.Kd6 Sc4+ 6.Kc5
Sxa5 7.Kd4 Kc7/xi 8.Ke4 Sb3 9.Kf3 c5 10.Bxc5
draw.

iii) 2.Kd7? Se5+, and 3.Kd8 c5, or 3.Ke6 Sf3. If
2.Kd8? Se5 3.a6 Sf3 4.Bxc7+ Ka7. Or if 2.Kf6?
Sf4 3.Ke5 Se2 4.Kd5 g1Q wins.

iv) Sh4 3.Kd7 Kb7 (Sf3;Bxc7+) 4.Bg1 Sf3 5.Bf2
Se5+/xii 6.Ke6 Sd3 7.Bg1 Ka6 (c5;Kd5) 8.Kd5
Kxa5 9.Ke4 Se1 10.Ke3 c5 11.Ke2 draw. If Kb7,
then not 3.Kf5? c5 4.Ke4 c4 5.Ke3 (Kd4,Se5);
Se5 6.Kf2 Sg4+ 7.Kxg2 Sxh2, but 3.Bg1 Sf4+
(Sh4;Kd7) 4.Kd7 Sd5 5.a6+ Kxa6 6.Kc6 Sc3
7.Kxc7 Kb5 8.Kd6 Kc4 9.Ke5 Kd3 10.Kf4 Ke2
(Se2+;Kf3) 11.Kg3 Kf1 12.Ba7 Se4 13.Kf3 Sg5+
14.Kg3 draw.

v) Sd5 4.Kc6 draw. Or Kb7 4.a6+ draw. Or Se2
4.Bxc7+, but not 4.Kc6? Sd4+ 5.Kd7 Kb7 wins.

vi) 4.Bxf4+? Kb7 5.Be3 c4 wins.

vii) Sd3 5.Kd5+ Kb7 6.Bg1 (Kc4? Se5+;) Ka6
7.Kc4 draw.

viii) Sd3+ 6.Kd4+ Kb7, and, for example, 7.Kxc4
Se5+ 8.Kd4 Sf3+ 9.Ke3 Sxh2 10.Kf2 drawn.

ix) 2.Kd7 Se5+, and 3.Ke6 Sf3, or 3.Kd8 Sc6+.
Or 2.Kd8, then Sf4 3.Be3 c5 4.Bxf4+
(Bxc5;Se6+) Ka8 5.Be3 c4 wins.

x) 2.Ke6? Sg6 3.Kd5 Sf4+ 4.Kc5 Se2, and if 5.a6
Kxa6 6.Kc6 Sd4+ (for Sf3+;), or 5.Kd5 g1Q
6.Bxg1 Sxg1 7.a6+ Kb6 wins.

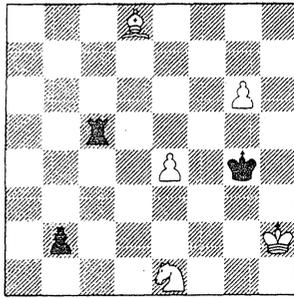
xi) Sb3+ 8.Kc3 Sc1 9.Kd2 Sa2 10.Ke2. Or Kb6
8.Ke4 Kb5 9.Kf3 Kc4 10.Kxg2 Sb3 11.Ba7 draw.

xii) g1Q 6.Bxg1 Sxg1 7.a6+ draw.

"The basic idea recalls a famous study of the

Sarychev brothers, in which wK encourages bP to advance only to catch up with it later. Lavaud's presentation is far more complex, introducing a K+B battery, but still in miniature form. An interesting study, well constructed."

No 10074 Jean Roche (France)
1HM PHÉNIX, 1988-90



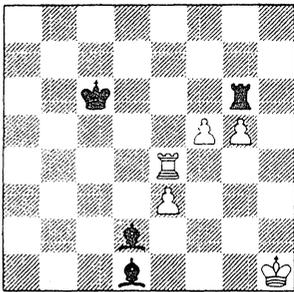
h2g4 0311.21

Win

No 10074 Jean Roche 1.g7 Rh5+ (b1Q:g8Q+)
2.Kg2 Rg5 3.Bxg5 b1Q 4.g8Q Qxe4+ 5.Kh2 Qg6
(Qe5+:Bf4+) 6.Qd5 Qh5+ 7.Kg1 Qxg5 8.Qf3+
Kh4+ 9.Sg2+ wins.

"A fine example of the current WCCT theme: a win study in which a mid-board stalemate is avoided. Bl's defence is obscure, and, once discerned, so is its refutation. 5...Qe5+, is a good supporting line."

No 10075 Yuri Makletsov (Russia)
2HM PHÉNIX, 1988-90



h1c6 0460.30

Draw

No 10075 Yuri Makletsov 1.Rxc4+/i Kb5 2.Rd4/ii
Bf3+ 3.Kh2 Bxe3 4.Rd3 Bf4+ 5.Kh3 Be4/iii
6.Rd4 Bxf5+ 7.Kh4 Bxg5+ 8.Kh5 Kc6 9.Rd5
draw.

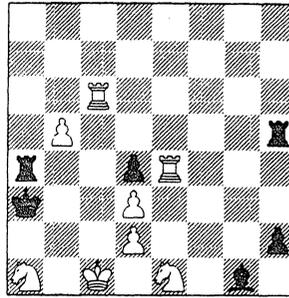
i) 1.Rd4? Rd6 2.Rc4+ Kd7 wins.

ii) 2.fxg6? Kxc4 3.g7 Bf3+ 4.Kh2 Bd5.

iii) Be2 6.Rd5+ Kc6 7.fxg6 draw.

"A very pleasing study showing a systematic manoeuvre of wR bBB. The wP scaffolding crumbles in the course of the solution."

No 10076 Marc Lavaud
3HM PHÉNIX, 1988-90



c1a3 0832.32

Draw

No 10076 Marc Lavaud 1.eSc2+ (Rc3+? Kb4;)
Ka2 2.Sb4+ Kxa1/i 3.Re1 Bf2/ii 4.Rh1 Rxb5/iii
5.Kc2+/iv Bg1 6.Rg6 bRxb4 7.gRxg1+ (hRxg1?
Ka2;) hxg1Q 8.Rxg1+ Ka2 9.Rb1zz Rc4+ 10.dxc4
d3+ (Rxc4+? Kd3) 11.Kxd3 Kxb1 12.Kc3/v Ka2
13.d4 Ka3 14.d5/vi Ra8 15.Kd4 Kb4 16.d6
Ka5/vii 17.Kc5 Rc8+/viii 18.Kd5 Kb6 19.d7 Rh8
20.Kd6 Rh6+ 21.Ke7 draw.

i) Ka3 3.bSc2+. Or Rxb4 3.Ra6+ Ra4 4.Rx4
mate.

ii) Rc5+ 4.Rxc5 Rxb4 5.b6 Ka2 (Rb1+? Kc2)
6.Ra5+ Kb3 7.Rh5 is a draw, but it is better than
Re5? 4.Rxe5 h1Q 5.Re1 Qh4 6.Rxg1 Qf2 7.Rd1,
when W wins.

iii) Rg5 5.Rxh2 Rg1+ 6.Kc2 Bg3 7.Rh3 draw.
Or Re5 5.Sc2+ Ka2 6.Rxh2 draw. Or Bg1 5.Rc4
Ra5 6.Sc2+ Ka2 7.Rb4 hRxb5 8.Rxb5 Rxb5
9.Sxd4 Bxd4 10.Rxh2 draw.

iv) Not 5.Rxh2? bRxb4 6.Rxf2 Rb1+ 7.Kc2 Ra2
mate. Nor 5.Rg6? bRxb4 6.Kc2+ Ka2 wins.

v) 12.Kd4? Kc2 13.Kd5/ix Kb3 14.c5 Kb4
15.Kc6 (d4,Kb5;) Ra6+ 16.Kb7 Kb5 17.d4 Rh6
18.Kc7 Kc4 19.Kd7 Kd5 20.Kc7 Kxd4 wins.

vi) 14.c5? Ra8 15.Kc4 Ka4 16.c6/x Ka5 17.Kc5
Ka6 18.d5 Ka7 19.d6 Kb8 20.Kd5 Kc8 21.Ke6
Ra1 22.Kd5 Rc1 wins.

vii) Rc8 17.Kd5 Rxc4 18.d7 draw.

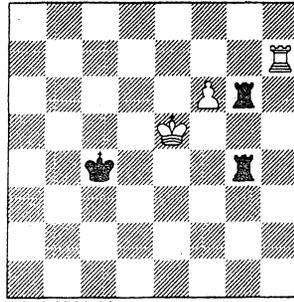
viii) Ka6 18.d7 Kb7 19.Kd6 draw.

ix) 13.Ke5 Kd3 14.c5 Kc4 15.d4 Ra6, and Bl
wins.

x) 16.d5 Ka5 17.d6 Ka6 18.Kd5 Kb7 19.c6+ Kc8
20.Ke6 Ra1 wins.

"The master-key to this study is the reci-zug after
9.Rb1! Despite this the long solution involving
play by various pieces scarcely contributes to the
artistic impression."

No 10080 Virgil Nestorescu (Romania)
Comm. PHÉNIX, 1988-90



e5c4 0700.10

Draw

No 10080 Virgil Nestorescu 1.f7/i R4g5+/ii 2.Kf4 Rg1 3.Kf5 R6g2 4.Rh4+/iii Kd5 5.Rf4 Rg6 6.Rh4/iv R1g5+ 7.Kf4 Rg1 8.Kf5 R6g2 9.Rf4 draw.

i) 1.Rc7+? Kd3 2.f7/v R4g5 3.Kf4 Rg1 4.Rd7+ (Kf5,R6g3;) Kc4 5.Rc7+ Kd5 6.Rd7+ (Rc5+,Kd4;) Kc6 7.Kf5 Rh6, but not Kxd7? 8.f8S+.

ii) R6g5+ 2.Kf6 Rb5 3.f8Q Rf4+ 4.Ke7 Rb7+ 5.Kd6 draw.

iii) 4.Kf6? Rf2+ 5.Ke7 gRf1 6.Ke8 Rf6 7.Ke7 R1f5 8.Ke8 Kd5 9.Ke7 Re6+ 10.Kd7 Ra6 11.Rg7 Ra7+ 12.Ke8 Ke6 13.f8S+ Rxf8 wins.

iv) 6.Rf3? R1g5+ 7.Kf4 Rf6+. Or 6.Ra4? R1g5+ 7.Kf4 Rg4+ 8.Kf3/vi Rg3+ 9.Kf2 Rg2+ 10.Kf3 Rg1 11.Kf2 R6g2+ 12.Kf3 Rb2 wins.

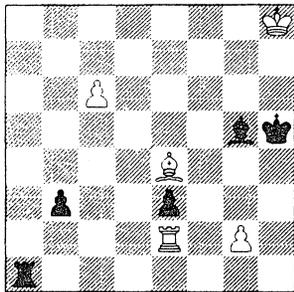
v) 2.Kf5 R4g5+ 3.Ke6 Rh6.

vi) 8.Kf5 R6g5+ 9.Kf6 Rxa4 10.Kxg5 Ra8 wins.

"A solid positional draw, without brilliance."

No 10081 Em.Dobrescu

Comm. PHÉNIX, 1988-90



h8h5 0440.22

Win

No 10081 Em.Dobrescu 1.c7 Rc1 2.Bc2/i Rxc2 3.Rxc2 bxc2 4.c8Q e2 5.Kh7/ii, with: e1Q 6.Qh3+ Qh4 (Bh4;Qf5+) 7.g4 mate, or c1Q/iii 6.Qh3+ Bh4 7.Qf5+ Qg5 8.g4 mate, but 8.Qf7+ (dual).

i) 2.Rc2? Rxc2 3.Bxc2 e2 4.c8Q e1Q 5.Qh3+ Qh4 6.Qf3+ Kh6 7.Qf8+ Kh5 draw.

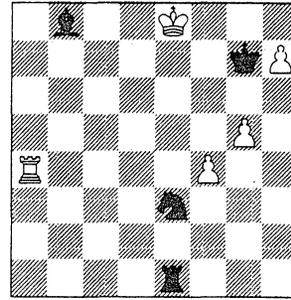
ii) 5.Qh3+? Kg6 6.Qd3+ Kf7 7.Qc4+ Kf6 draw. Or 5.Qe8+? Kh4 6.Qe4+ Kg3 7.Qd3+ Kh2 draw.

iii) Bd2 6.g3 e1Q 7.Qf5+ Bg5 8.Qf3 mate. Or e1S 6.g3 wins.

"A higher place would have been earned had it not been for the terminating dual in the second thematic line."

No 10082 Sergei Rummyantsev (Russia)

Comm. PHÉNIX, 1988-90



e8g7 0433.30

Draw

No 10082 Sergei Rummyantsev 1.Re4 Bxf4/i 2.h8Q+ Kxh8 3.Kf7 Sg2/ii 4.g6 Bh6 5.g7+ Bxg7 6.Rh4+ Sxh4 stalemate.

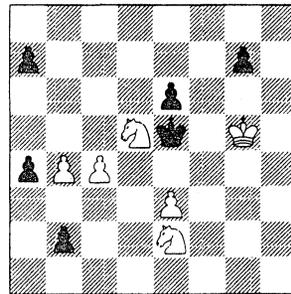
i) Sg2 2.Rxe1 Sxe1 3.f5 Kxh7 4.f6 Bd6 5.Kf7 Sf3 6.g6+ Kh6, and 7.g7 Sg5+ 8.Kg8 Kg6 9.f7 Sxf7 stalemate, or 7.Kg8 Se5 8.g7 Kg6 9.f7 Sxf7 stalemate.

ii) Bxg5 4.Kg6. Or Rf1 4.Kg6.

"A pretty stalemate study. I have replaced bBc7 on b8 so as to eliminate the demolition 1.Re4 Ba5!"

No 10083 Marc Lavaud

Comm. PHÉNIX, 1988-90



g5e5 0002.35

Win

No 10083 Marc Lavaud 1.dSc3 a3 2.c5/i b1Q 3.Sxb1 a2 4.Sd2 a1Q 5.e4 Qa6/ii 6.b5 Qa1/iii 7.Kg6zz a6 8.b6 wins.

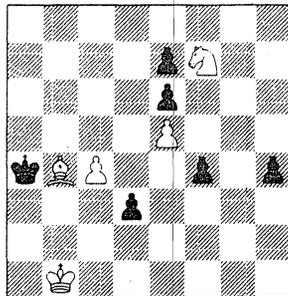
i) 2.Sb1? a2 3.eSc3 a1Q 4.c5 g6z 5.Kxg6 Qa6. Not, for Bl, in this, 4....Qa6? 5.Sd2, nor a6? 5.e4 (Kg6? Qa5;) Kd4 6.c6 wins. 2.Sd4? a2 3.c5 b1Q. ii) Qa2 (Qa4/Qd1) 6.Sf3+ Kxe4 7.Sc3+ and 8.SxQ wins. Qa3 (Qb2/Qe1) 6.Sc4+ (also Sf3+) Kxe4 7.SxQ. Qh1 6.Sc4+ Kxe4 7.Sg3+ and 8.SxQ. a5 6.bxa5 (b5 also) wins. iii) Qa5 7.Sc4+. Qxb5 7.Sf3+ Kxe4 8.Sc3+. Qb7 (Qc8) 7.Sc4+ Kxe4 8.Sd6+. Qa5 7.Sc4+. "wSS dominate bQ. The reci-zug is important."

Schakend Nederland, 1991

This informal tourney was judged by Jan van Reek, replacing the late Jan Marwitz. Provisional award published in Schakend Nederland 6/92, 31 studies by 26 composers from 11 countries published.

Definitive award published in Schakend Nederland 10/92 (xi92), Remarks: the replacement judge's own 2250 was hors concours.

No 10084 N.Daniliuk (Russia)



b1a4 0011.25

Win

No 10084 N.Daniliuk 1.Bd2/i f3 2.Sg5 f2 3.Se4/ii f1Q+/iii 4.Ka2/iv Qg1 5.Sc3+ Kb4 6.Se2+ Ka4 7.Sxg1 h3 8.Sf3/v h2 9.Se1 h1Q 10.Sxd3 wins.

i) 1.Be1? h3 2.Sg5 d2 3.Bxd2 h2 4.Se4 h1Q+.

ii) 3.Ka2? f1S 4.Bc3 Se3 5.Se4 Sxc4.

iii) This provisional winner of first prize was eliminated in confirmation time (that's what confirmation time is for!) because of f1S 4.Bc3 Kb3....

iv) and the dual 4.Kb2 Qg1 5.Sc3+ Kb4 6.Se2+ Ka4 7.Sxg1 h3 8.Bf4.

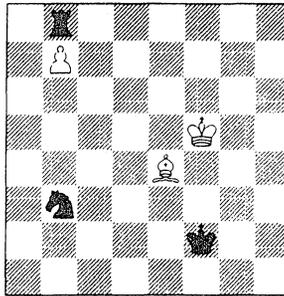
v) 8.Bf4? d2 9.Se2 h2 10.Bxh2 Kb4.

"Mind over matter."

EG's justification for reproducing tourney eliminatees is two-fold: to forestall queries; and to stimulate corrections.

No 10085 José Mugnos and Oscar J.Carlsoson (Argentina)

dedicated to Jan Timman
1st prize Schakend Nederland, 1991



f5f2 0313.10

Draw

No 10085 José Mugnos and Oscar J.Carlsoson 1.Ke6/i Sc5+/ii 2.Kd6 Sa6 3.Kc6 Rf8/iii 4.Kb6 Sb8/iv 5.Kc7/v Ke3 6.Bf5 Kd4 7.Bc8 Sa6+ 8.Kb6 Rf6+ 9.Ka7 Kc5 10.Bg4/vi Sb4/vii 11.b8Q/viii Sc6+ 12.Kb7 Sxb8 13.Kxb8 Kc6 14.Bd1/ix Rf4 15.Ka7/x Rf6 16.Ka6 draw.

i) 1.Ke5? Rd8 2.Ke6 Sc5+ 3.Ke7 Rh8 4.Kd6 Sxe4+ 5.Kc7 Sc5 wins.

ii) Rd8 2.Ke7 Rh8 3.Kd6 Ke3 4.Bf5 Sa5, and 5.Bc8 or 5.Kc7, draw.

iii) Rh8 4.Kb6 Rh6+ 5.Ka7 Sc5 6.Bd3 draw.

iv) Rf6+ 5.Ka7, and Ke3 6.Bg2 Sc5 7.b8S, or Sc5 6.Bd3 Rf7 7.Ba6 Rf6 8.Bc4 draw.

v) 5.Ka7? Ke3 6.Bf5 Kd4 7.Bc8 Sc6+ 8.Kb6 Kd5 9.Kc7 Kc5 10.Bd7 Sb8 11.Bc8 Sa6+ 12.Kd7 Rf7+ 13.Ke8 Rc7 14.Kd8 Kb6 wins.

vi) The composers analyse alternatives: 10.b8Q? Sxb8 11.Kxb8 Kb6 wins. Or alternative moves by wB: 10.Bd7? Rf3 and 11.Ba4 Ra3 12.Bd7 Sb4+ 13.Kb8 Kb6, or 11.Bc8 Sb4 12.b8S Rf7+, or 11.Bg4(Bf5) Rc3 12.Bd7 Ra3 13.b8Q Sxb8+ 14.Kxb8 Kb6, or 11.Be8 Rc3 12.Bg6 Ra3 13.Be4 Sb4+ 14.Kb8 Kb6, winning.

Or 10.Bh3? Rf2, and 11.b8Q Sxb8 12.Kxb8 Kc6 13.Be6 (Ka7,Rb2;) Rf8+ 14.Ka7 Rf6 15.Bg4 Kc7, or 11.Bd7 Rf3 12.Bg4 Rc3 13.Be6 Kb5 14.Bf5 Ka5 15.Be4 Rc7 16.Bf3 Sc5 17.Ka8 Sxb7 18.Bxb7 Kb6 wins.

Or 10.Bf5? Sb4 11.Be4 Ra6+ 12.Kb8 Re6 13.Kc8 Sa6 wins.

vii) Rf4 11.Be2 Sb4 12.Bb5 Rf7 (Sc6+;Bxc6) 13.Ka8 Sd5 14.Ba4 Sb6+ 15.Ka7 Sxa4 16.Ka6 draw. Or Rf2 11.b8Q Sxb8 12.Kxb8 Kc6 13.Bd1, as main line.

viii) 11.b8S? Rf7+ 12.Sd7+ (Bd7,Sc6+;) Kc6 13.Kb8 Re7 14.Bh3 Sa6+ 15.Ka8 Kc7 16.Ka7 Sb4 17.Bg4 Re1 wins.

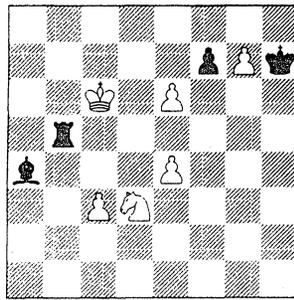
ix) 14.Bh5? Rf8+ 15.Ka7 Kc7 16.Ka6 Rf6+

17.Ka7 Rf5. Or 14.Bh3? Rf2 15.Bg4 Rf7 16.Bd1 Rc7 17.Bf3+ Kb6 wins.

x) 15.Bc2? Kb6. Or 15.Bh5? Rf8+ 16.Ka7 Kc7 wins. Or 15.Be2? Rf7 16.Bd1 Rc7 wins.

No 10086 Michal Hlinka (Košice, Slovakia)

2nd prize Schakend Nederland, 1991



c6h7 0331.41

Draw

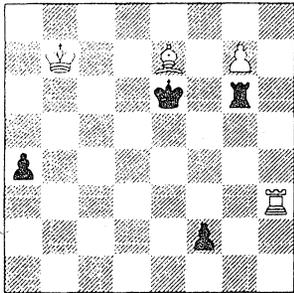
No 10086 Michal Hlinka 1.g8Q+ Kxg8 2.exf7+ Kxf7/i 3.Sc5 Ra5+ 4.Kb6 Ra8 5.Kb7 Ra5 6.Kb6 Rb5+ 7.Kc6 Rb4+ 8.Kd5 Bb3+ 9.Kd6/ii Rb6+ 10.Kc7 Rb5 11.Kc6 Rb8 12.Kc7 Rb5 13.Kc6 Rb8 14.Kc7, positional draw.

i) 2...Kf8 follows the main line until move 9, when, not 9.Kd6? Rb5 10.Kc6 Bc4 but 9.Kc6 Rc4 10.Kb5 Rxc3 11.Kb4 Rc4+ 12.Kb5 Ba2 13.Sd7+ Kxf7 14.Se5+ and 14.Sxc4.

ii) 9.Kc6? Rc4 10.Kb5 Ba2.

No 10087 Henk Enserink (Holland)

3rd prize Schakend Nederland, 1991



b7e6 0410.12

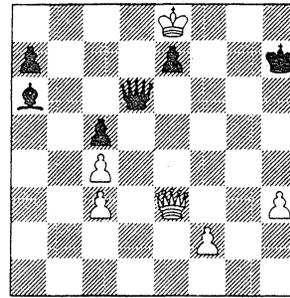
Win

No 10087 Henk Enserink 1.Rh6 Rxh6 2.g8Q+ Kxe7 3.Qg7+ Ke8 4.Qe5+ Kf7 5.Qc7+ Ke8 6.Qc8+ Kf7 7.Qc4+ Re6 8.Ka8/i a3 9.Qc7+ Ke8 10.Qb8+ Kd7 11.Qa7+ Kc6 12.Qxf2 Re8+ 13.Ka7 Kb5 14.Qb6+ wins.

i) 8.Kb8? would remove a checking square from wQ. If 8.Kc8? a3 9.Kd7 a2 10.Qxe6+ Kg7 11.Qe5+ Kg6 12.Qa1 Kf5 13.Kd6 Kf4 14.Kd5 Kg3 15.Ke5 Kg2 16.Qxa2 Kh1 17.Qxf2, and it's only stalemate.

No 10088 Nico Cortlever (Holland)

Special prize Schakend Nederland, 1991



e8h7 4030.43

Draw

No 10088 Nico Cortlever 1.Qe4+/i Qg6+ 2.Qxg6+ Kxg6 3.Kxe7 Bb7/ii 4.Kd6 a5 5.Kxc5 Bc6 6.f3 Bd7 7.f4 Bc6 8.h4zz Bd7/iii 9.f5 Kf6 10.h5 Kg5 11.h6 Kxh6 12.f6 Kg6 13.Kd6 draw.

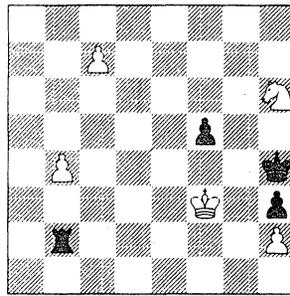
i) 1.Qxe7+? Qxe7+ 2.Kxe7 Bb7 3.Kd6 a5 4.Kxc5 Bc6, and B1 will win.

ii) Bc8 4.Kd6 a5 5.Kxc5 Bd7 6.f4, is the main line.

iii) Kg7 9.h5 Kh6 10.f5 Kxh5 11.f6 draw.

No 10089 Ignace Vandecasteele (Belgium)

1st Hon.Men. Schakend Nederland, 1991



f3h4 0301.32

BTM, Win

No 10089 Ignace Vandecasteele 1...Rc2 2.Sxf5+ Kg5 3.Sd4/i Rc3+ 4.Ke4 Kf6 5.Sb5 Rc2 6.Sd6 Ke6 7.c8Q Rxc8 Sxc8 wins.

1...Rb3+ 2.Ke2 Rc3 3.Sxf5+ Kg5 4.Sg7+/ii Kf6 5.b5 Ke7 6.b6 Kd7 7.Se8 Rb3 8.Sd6 Rc3 9.Sb5 Rb3 10.b7 wins.

i) 3.Sg7? Kf6 4.b5 Ke7 5.b6 Kd7 6.Se8 Rb2 7.Sd6 Rc2 8.Sb5 Kc8 draw.

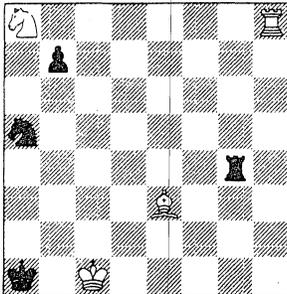
ii) 4.Sd4? Kf6 5.Sb5 Rc2 6.Kd3 Rc6 7.Ke4 Ke7 8.Kd5 Kd7 draw.

Special HM. Schakend Nederland, 1991

John Nunn (and Ken Thompson database)

See EG104 p36. The 14 consecutive unique captureless winning moves are remarkable. To what extent a specially written program assisted in

scanning the database has not been divulged.
 No 10090 V.Kovalenko (Russia)
 1st commendation Schakend Nederland, 1991



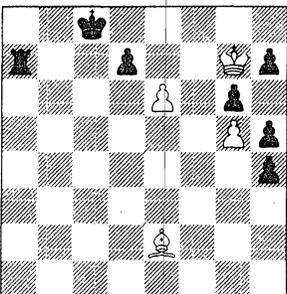
c1a1 0414.01

Win

No 10090 V.Kovalenko 1.Sb6 Rb4 2.Bd4+/i Rxd4
 3.Ra8 Ka2 4.Kc2 Ka3 5.Kc3 Ra4 6.Ra7, and Bl,
 in zugzwang, loses.

i) 2.Ra8? Rb1+ 3.Kc2 Rb2+ 4.Kd3 Rb3+ 5.Ke2
 Ra3 6.Bd2 Sc4 drawn.

No 10091 H.Gron dij s
 2nd commendation Schakend Nederland, 1991



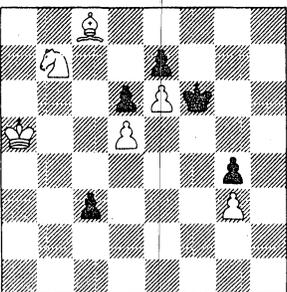
g7c8 0310.25

Draw

No 10091 H.Gron dij s 1.e7 d5 2.Bg4+/i Kb8/ii
 3.Bd7 Rxd7 4.Kh6 Rxe7 stalemate.

i) 2.Kf8? Rxe7 3.Kxe7 d4 wins.
 ii) hxg4 3.Kh6 Kd7 4.e8Q+ Kxe8 stalemate.

No 10092 Wouter Mees (Holland)
 3rd commendation Schakend Nederland, 1991



a5f6 0011.34

Draw

No 10092 Wouter Mees 1.Sc5/i dxc5 2.d6 exd6
 3.e7 Kxe7 4.Bf5 Kf6 5.Bb1 Ke5 6.Kb6 Kd4
 7.Kc6 Ke3 8.Kxd6 Kf3 9.Kxc5 Kxg3 10.Kd4
 Kf4/ii 11.Kd3 g3 12.Ke2 draw.

i) 1.Sxd6? c2 2.Se4+ Kf5 3.d6 c1Q.

ii) Kf3 11.Kxc3 g3 12.Kd4 g2 13.Be4+.

If the study has a familiar ring the reader may be
 recollecting a 1958 KNSB honoured study, of
 which the present work is a version.

Schakend Nederland 1992

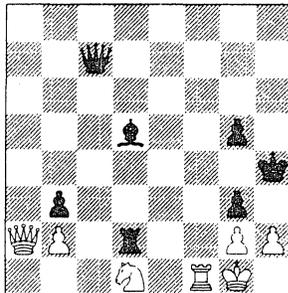
This informal tourney is also known as: "Marwitz
 Memorial" and was judged by Jan van Reek.

The provisional award was published in Schakend
 Nederland ii1993. 23 studies by 19 composers
 from 9 countries entered.

The definitive award was published in Schakend
 Nederland vii1993, the reasons for elimination of
 three studies in Schakend Nederland vi1993.

4 out of 10 awarded studies were eliminated
 during the confirmation period.

No 10093 Oleg Pervakov (Moscow)



g1h4 4431.33

Draw

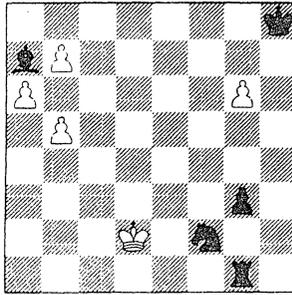
No 10093 Oleg Pervakov 1.Qa4+ g4 2.Se3 gxh2+
 3.Kh1 Rxxg2 4.Sxxg2+/i Kh3 (Kg3;Rf3+) 5.Rf3
 Bxf3 6.Qc6 Qd6 7.Qd5 Qe5 8.Qe4 Qf5 9.Qd3
 Qg6 10.Qe4 Qh6 (Qf5;Qd3) 11.Qe3 Qg5/ii
 12.Qd2 Qf4 13.Qe3, draw.

i) 4.Sxd5? Rg1+ 5.Rxxg1 hxxg1Q+ 6.Kxxg1 Qc1+
 7.Kf2 Qxb2 8.Ke3 Qe5+ 9.Qe4 Qxe4+ 10.Kxe4
 b2 11.Sc3 g3 wins.

ii) Qf4 12.Qxf3+ gxf3 13.Sxf4+ Kg4 14.Sd3 Kg3
 15.Sc5 f2 16.Se4+ Kf3 17.Sg3 Kxxg3 stalemate.

This study provisional awarded 1st prize was
 eliminated because of 1... Qc4 2.Qxc4 Bxc4
 3.hxxg3 Kh5 4.Re1 Kg6 and black wins

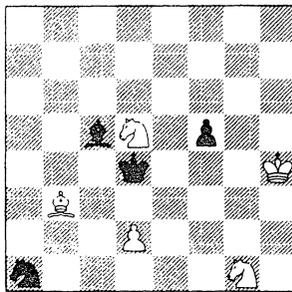
No 10094 Oscar J.Carlsson and Zoilo C.Caputto
(Buenos Aires)
1st prize Schakend Nederland 1992



d2h8 0333.41

Draw

No 10094 Oscar J.Carlsson and Zoilo C.Caputto
1.b6 Se4+ 2.Ke2 Re1+ 3.Kf3 (Kxe1? g2;), with:
Bb8 4.a7 Sg5+ 5.Kg4/i Re8 6.a8Q g2 7.Qa1+
Re5 8.Qg1 Kg7 9.Qxg2 Kxg6 10.Qc6+
Re6(Se6;Qe8+) 11.Qc7 draws, or
Sd2+ 4.Kg2 Rg1+ 5.Kh3 Rh1+ 6.Kg2/ii Rh2+
7.Kxg3 Bb8+ 8.Kg4 Rg2+ 9.Kf5 Rf2 10.Ke6
Re2+ 11.Kf7 Rf2+ 12.Ke6 drawn.
i) 5.Kg2? Re2+ 6.Kf1 Rf2+ 7.Ke1 Sf3+ 8.Kd1
Rd2+ 9.Kc1 Rd8 10.a8Q g2 11.Qa1+ Be5 wins.
ii) 6.Kxg3? Bb8+ 7.Kg4 Ra1 8.a7 Rxa7 wins.
No 10095 Emilian Dobrescu (Bucharest)



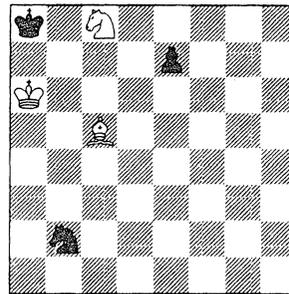
h4d4 0045.11

Win

No 10095 Emilian Dobrescu 1.Ba2 Ke4 2.Sc3+
Kd3 3.Sf3 Bb4 4.Bb1+ Sc2 5.Sa2 Bxd2 6.Kg3
Ba5 7.Kg2/i Bd2 8.Kf2 Be3+ 9.Kf1/ii Bd2
10.Kg2 f4 11.Kf2 Be3+ 12.Kf1 Bd2 13.Kg2 Ba5
14.Se5+ Kd2 15.Sc4+ Ke2 16.Bxc2 f3+
17.Kh3(Kh1) f2 18.Sc1+ Ke1 19.Sd3+ Ke2
20.Sxf2, winning.
i) 7.Kf2? Bb6+ 8.Kg3 Bc7+ 9.Kg2 f4 10.Se1+
Ke2 11.Sxc2 f3+ 12.Kh3(Kh1) f2 13.Sd4+ Ke1
14.Sf3+ Ke2 draws.
ii) 9.Kg3? f4+ 10.Kg2 Bc5 11.Se1+(Sb4+) Ke2
draws.
This study provisional awarded. 3rd prize was

eliminated because of 5.Sb5 Bxd2 6.Sbd4, a dual
indicated by Missiaen

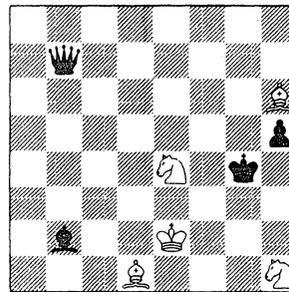
No 10096 Ignace Vandecasteele and
Roger Missiaen (Belgium)
2nd prize Schakend Nederland 1992



a6a8 0014.01

Win

No 10096 Ignace Vandecasteele and
Roger Missiaen 1.Ba7 Sa4 2.Bd4 e5/i 3.Ba7 e4
4.Se7 (for Sd5) Sc3 5.Bd4 Sd1/ii 6.Be5 Se3
7.Bg3 Sc4 8.Sd5 e3 9.Sf6 e2 10.Sd7 e1Q 11.Bxe1
Se3 12.Sb6 Kb8 13.Bg3 mate.
i) e6 3.Kb5 Kb7 4.Sd6+ Kc7 5.Sc4 e5 6.Sxe5
wins.
ii) Sa2 6.Sd5 (for Sb6) Kb8 7.Be3 Kc8 8.Kb5
Kd7 9.Kc4 Kd6 10.Sf4 wins.
No 10097 David Gurgenidze (Georgia)

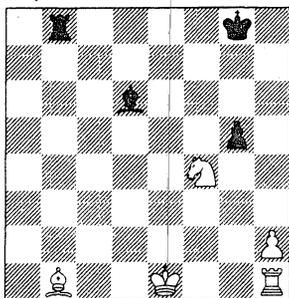


e2g4 3052.01

Win

No 10097 David Gurgenidze 1.Ke3+ Kh4 2.Bg5+
Kh3 3.hSf2+ Kg2 4.Bf3+ Kgl 5.Sh3+ Kh2
6.Bf4+ Kxh3 7.Sg5+/i Kh4 8.Bxb7 Bc1+ 9.Kf2
(Kf3? Bxf4;) Bxf4 10.Sf3+ Kg4 11.Bc8 mate.
i) 7.Sf2? Kh4 8.Bxb7 Bc1 9.Kf3 Bxf4 10.Kxf4
stalemate.
This study provisional awarded 1st HM was
eliminated because 1.Kf1 (Missiaen) and 1.Shf2
(Timmer) also win

No 10098 Robert Timmer (Hilversum, Holland)
3rd prize Schakend Nederland 1992



e1g8 0441.11

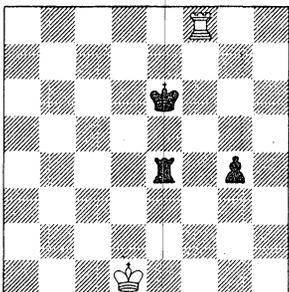
Win

No 10098 Robert Timmer 1.Ba2+ Kg7 2.Sh5+/i Kg6 3.Sg3 Rb2 4.Bd5 Rxh2 5.Be4 Kf6(Kf7) 6.0-0+ wins.

i) 2.Se6+? Kg6 3.0-0 Bxh2+ draws.

No 10099 John Nunn (London)

Special HM Schakend Nederland 1992



d1e6 0400.01

Draw

No 10099 John Nunn Unearthed from a database, based on a database reciprocal zugzwang:

d2e5 0400.01 f8e4.g4.

1.Kc2/i Ke5/ii 2.Kd2z g3/iii 3.Kd3 Rg4 4.Re8 Kf6 5.Rf8+ Kg7 6.Rf1 g3 7.Rg1 drawn.

i) 1.Kd2? Ke5z 2.Kd3 Rf4 3.Re8+ (Rg8,Rf3+;) Kf5 4.Ke2 Kg5 5.Rh8 g3, and B1 wins. 1.Re8? Kf5 2.Rxe4 Kxe4 3.Ke2 g3 wins. 1.Rf1? Ke5 2.Re1 Kf4.

ii) Rd4 2.Kc3 Rd7 3.Rf4 Rg7 4.Kd3 g3 5.Rf1 g2 6.Rg1 Kf5 7.Ke3 draw.

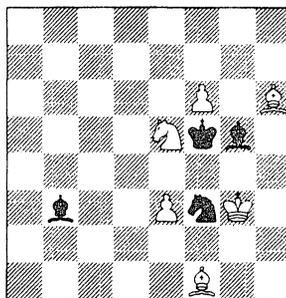
iii) Rf4 3.Rg8 Kf5 4.Ke2 Rf3 5.Rf8+ to exchange rooks.

No 10100 G.Kasparyan 1.Sg4/i Bh4+ 2.Kxf3 Bd5+ 3.e4+ (Ke2? Kxg4;) Bxe4+ 4.Ke3 Bd5 5.Bh3 Bxf6 6.Se5+ Kxe5 7.Bf4 mate.

i) 1.Sxf3? Bxh6 2.Sd4+ Kxf6 3.Sxb3 Bxe3 draw.

This study provisionally awarded 1 Comm was eliminated because 1... Bd5 draws (Bacqué)

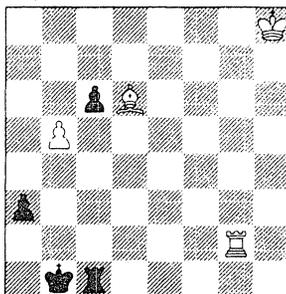
No 10100 G.Kasparyan (Armenia)



g3f5 0084.20

Win

No 10101 Harrie Grondijs (Holland)
4th prize Schakend Nederland 1992



h8b1 0410.12

Win

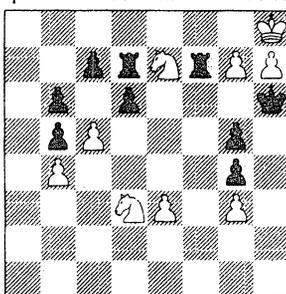
No 10101 Harrie Grondijs 1.b6 a2 2.Be5 a1Q/i 3.Bxa1 Kxa1 4.Rg4/ii Rh1+/iii 5.Kg7 Rd1 6.Ra4+ Kb2 7.Rb4+ Kc3 8.b7 Kxb4 9.b8Q+, with a win.

i) Rh1+ 3.Kg7 a1Q 4.Bxa1 Kxa1 5.Rb2 wins.

ii) 4.b7? Rh1+ 5.Kg8 Rb1 6.Rg7 c5 draws.

iii) Rb1 5.Ra4+. Or Rd1 5.b7 Rd8+ 6.Rg8 wins.

No 10102 Emil Vlasak and Karel Husak (Czech Republic)
Special commendation Schakend Nederland 1992



h8h6 0602.66

Draw

No 10102 Emil Vlasak and Karel Husak 1.Se5 dxe5 2.c6, with:

dRxe7 3.e4 Kh5/i 4.g8Q Rf6 5.Qd8 fRe6 6.Qf8 Re8 7.Kg8 Rg6+ 8.Kf7 Rxf8+ 9.Kxf8 Rf6+ 10.Kg8 Rh6 11.Kg7zz Rxx7 12.Kxx7 stalemate.

or
Rd8+ 3.Sg8+ Kg6/ii 4.e4 dRf8/iii 5.gxf8S Rxf8 stalemate.

i) Re8+ 4.g8S+ Kg6 stalemate. Or Kg6 4.g8Q+ Kf6 5.Qg7+ Ke6 6.Qg6+ Rf6 7.Qg8+ fRf7 8.Qg6+ draw.

ii) Kh5 4.e4 Rd6 5.Sf6+ draw.

iii) Rd6 5.Se7+ Rxe7 6.g8Q+ drawn.

1. XXXVIII FIDE PCCC Meeting -
Turku (Finland) 22-29viii1995

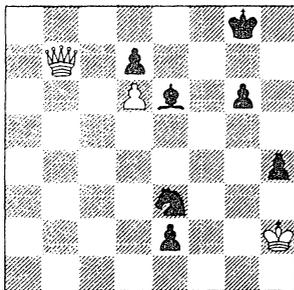
2. FIDE Album 1992-1994 Selection
Tourney - Announcement

Our Finnish friends being both so meticulous and so reliable it behoves us to believe them when they tell us that their homeland includes 179,584 islands and 187,888 lakes. We would like to have experienced them all. As it was, Tammenterho Nature Reserve and neater-than-neat Naandali were compulsive viewing on the glorious day that concluded with a head-swimming home-coming to Turku the scenic, social and gastronomic way - by water. The bearded ship's captain shook hands with each and every one of us as we stepped on board.

Talking of boards there was chess composing galore, though just one studies-related event, a Russian plea for a repair-job on this Troitzky.

A.A.Troitzky

Shakhmatny Zhurnal, 1896



h2g8 1033.14 b7e6e3.d6d7e2g6h4 3/7=.

1.Qa8+ Kh7 2.Qe4 Sg4+ 3.Kh3 Sf2+/i 4.Kxh4 Sxe4 stalemate.

i) But 3...Se5+, and Black wins.

And there was chess solving, with the host team headed by ageless enigmatic postman Pauli Perkonoja triumphing when it mattered most, in both WCSC team and individual events.

Ukraine was admitted as a PCCC member, with study-composer Gorbunov the delegate.

The full complement of seven extant standing sub-committees was in action, with PCCC President Bedrich Formánek putting in an appearance at them all. They were, with a parenthesised approximation of the number of participants: Codex - the oldest (5); Computers (9); FIDE Album and Publications (8); Qualifications - ie, for awarding titles (5); Studies (5); WCCT (6); WCSC (5). To resolve a doubt relating to the application of simple or two-thirds majorities in voting in the full PCCC, a Statutes (3) sub-committee was formed, performed its work well, and was dissolved.

As if these were not enough, a new standing sub-committee was formed, for 'Terminology' (5). A number of hearts sank. It is not that we cannot use a single authoritative reference for good definitions - of course we can. But the task is time-consuming (consider just one aspect, that of *translation!*) to the point of impossibility, and if, as may well be the case, there are terms that deserve a choice or range of definitions (for example according to genre), debate will be endless. No studies specialist volunteered to serve!

The Studies Sub-committee worked exceedingly well, half of the time in Russian. An addendum to the notorious '50-move rule' (part of Article 10 'The Completed Game' of the FIDE Laws of Chess) was recommended to the full Commission.

[The current wording reads: "The game is drawn when a player having the move claims a draw and demonstrates that at least the last 50 consecutive moves have been made by each side without the capture of any piece and without the movement of any pawn. This number of 50 moves can be increased for certain positions, provided that this increase in number and these positions have been clearly announced by the organizers before the event starts." Curiously, no one seems to have pointed out the absurdity that as the wording stands the *capture of a pawn by a piece* does not interrupt the count. Also, as the late André Chéron pointed out decades ago, 'and without checkmate' still needs to be added.]

The proposed addendum.

"Footnote on composed endgame studies.

Notwithstanding the foregoing, no limitation on the number of moves shall apply to the correct solution to a composed chess endgame study, unless explicitly stated otherwise, for example as an addition to the stipulation. (A study is a composed position with a stipulation of 'win' or

'draw'. In a study there is no player to make a claim and no person to whom to address a claim. In a study the sole criterion of a true result is analytical proof.)"

The full Commission, without discussion, approved the wording, which is being passed on for consideration by the authorised body, namely the FIDE Rules Committee. This committee meets at four yearly intervals. Its next scheduled meeting is before the end of 1995.

The Studies sub-committee did more work. It asked Israel to consider the inclusion of a studies-only solving contest at the meeting in Tel-Aviv (12-19x96, 'registration' by 15viii96); respectfully requested the other sub-committees ('Terminology'?) to bear in mind the existence of the Studies Sub-Committee in their deliberations; suggested that guidelines for the rational naming and identification of tourneys be drawn up - especially, a *year* is essential, and the precise place where the full award will be published must be stated in the announcement.

We permit ourselves a clarificatory observation.

The correct year of a tourney is the *year of its closing date*, despite the fact that (under the current rules) for *FIDE Album purposes* the 'year' is the year of publication of an *award*. This exception is the cause of confusion. A hypothetical example may help: studies entered for a '1991' formal tourney properly qualify for entry to the FIDE Album selection process for the three-year period 1992-94 if the formal tourney award was published only in 1992. In other words, the FIDE Album is an exception to the general rule governing the dating of a composition. The justification is that the position (ie, the diagram) will not have been published during the earlier period. In such cases it is right and proper, when the facts have been established and confirmed, for a '1991' study to be included in the '1992-94' Album. With an *informal* tourney this consideration does not apply, since the diagram will have been published in the earlier period.

The following studies-related decisions were taken by the PCCC at Turku.

1. The title of International Judge was awarded to Iuri Akobia (Georgia).

2. As a result of inclusions in FIDE Albums the following chess composition titles were awarded:

2.1 International Master (25 Album points): Pal Benko (Hungary and USA); Oleg Pervakov (Russia); Aleksei Sochniev (Russia).

2.2 FIDE Master (12 Album points): Nicolae Micu (Romania); Nikolai Ryabinin (Russia); Vladimir Sychev (Belorussia); Revaz Tavariani (Georgia).

3. For the FIDE Album 1992-1994 the following were provisionally appointed (studies section):

Director: A.J.Roycroft (Great Britain)

Judges: Yochanan Afek (Israel), David Gurgendz (Georgia), Nikolai Kralin (Russia). Reserves: Pauli Perkonaja (Finland), Emilian Dobrescu (Romania). The closing date for entries (in 4 copies clearly diagrammed, complete solution and full publication source within the 3-year period including photocopy with legible date if appropriate, award honour if any, name and address, diagram control) is 1viii96, to the section director. Composers should note that the 1996 PCCC meeting is scheduled for October, and that this is over two months too late for delivery of entries by hand.

(N.Kralin is not a holder of the title of International Judge. However, his formidable judging record and qualifications were presented to the full PCCC and his name was accepted.)

Offers to host the FIDE PCCC in 1997 came from Russia (with St Petersburg the venue) and Mongolia (Ulan-Baatar), with Italy also a possibility.

No PCCC meeting passes without at least one animated discussion. This year's stimulus was a proposal for 'World Champion' titles linked to most points in each FIDE Album section. For some countries this would provide good opportunities for publicity, influence, even personal reward. Some less enthusiastic delegates nevertheless supported the view that *some* form of recognition would be beneficial, even if 'World Champion' might not be a suitable vehicle. Opponents claimed that there are already too many titles, that arithmetic should not apply to an art form, and that potential consequences of envy, and of pressure to gerry-mander points, are better avoided. It was reported that in Belgium lying naked on the beach is a recognised competitive sport while chess is not. No decision was taken.

Reviews

Endgames of Iosif Krikheli, edited by Merab Gogberashvili and Iuri Akobia, 48 pages, semi-stiff cover, Tbilisi 1995, in English. Figurine notation with diagrams. Presented in chronological order there are 95 published, and the remarkable number of 43 (forty-three!) previously unpublished, studies in this valuable collection of the work of the versatile Georgian composer who died so unexpectedly in 1988, only four years after being awarded the FIDE title of Grandmaster of Composition. Studies known to be unsound, and versions, have not been included. The preparation work was by GM David Gurgendz from the

composer's personal archive. Diagram and source detail appear to be of a high standard of accuracy. There is a theme index. A photograph and biographical note adorn the back cover.

Study Mosaic No.4, by David Gurgenzidze and Iuri Akobia, 32 pages, Tbilisi 1994, in Russian (one article in English). The series devoted to matters pertaining to the study art continues with this excellent number. In seven sections, Gurgenzidze's article illuminates assorted aspects of composing. Akobia presents the first of his reports in English (covering fortress-blockade) on the state of his systematic dissection of the positional draw theme, the formidable topic of the looming 3rd volume in his "World Anthology of Chess Studies", a ground-breaking volume, again with more than four thousand examples (and twice as many diagrams), that is eagerly awaited by study enthusiasts. *Mosaic 4* concludes with the recent Georgian awards "Tavariani-70", "B.Gurgenzidze-60", and "Gori-1993", with the blitz composing tourney of Belfort-1994 appended.

Study Mosaic No.6, Tbilisi 1995. This follows the rich pattern of No.4 in the series, beginning with D.Gurgenzidze on study themes extracted from endgame theory. Akobia here covers the perpetual attack (pursuit) type of the positional draw, the next in his advance versions of the introductions to each part the impending 3rd anthology volume. Retrospective Georgian awards included are: "Garedzhi-84" (1984), "Pobeda-40" (1985), "Rustavi-86" (1986), "Golden Fleece-86" (1987), and "Kaissa-86/87", this last having been organised by the Georgian radio and TV newspaper.

Best Studies 2, by David Gurgenzidze, in the semi-stiff cover series edited by Gogberashvili and Akobia, 48 pages, in English. The next 132 studies in this wonderful and very popular selection. Five corrections are published for the first time. A concluding selection is announced.

Chess problems and studies, by V.V.Kuzmichev, Archangel, 76 pages, 1995. In Russian, with a semistiff cover. There is introductory and other matter. 15 studies by the composer are included among 120 of orthodox genres, and there are 62 unpublished positions. Paper, diagrams, source detail and clarity of type - all are admirable.

BELFORT 1994, a supplement to *Diagrams-114* and *Phenix-31*. Dated 1994, and available at Turku in 1995, this illustrated

140-page lemon-covered book is a full account of persons, decisions, events and tourneys experienced at the XXXVII FIDE PCCC meeting - the hot one, as those who were there will recall. Our statement ("less so on the studies front") on p434 of EG/12 was hasty - the studies content at Belfort was exceptionally rich: a thematic blitz composing tourney judged by Iuri Akobia; "Matseshka" tourney judged by Arkady Khait; "Ural Problemist" award by Rummyantsev and Selivanov (see EG/15); the "Study of the Year" for each of the years 1989, 1990 and 1991, as selected and approved by the PCCC Subcommittee for studies (see EG/12); and two lectures, "Systematic and Geometrical Movements" by Oleg Pervakov, and "Zugzwangs for your Pleasure" by John Roycroft.

Announcement

Prospective purchasers of Iuri Akobia's hard cover *World Anthology of Chess Studies*, Volume III, '4324 studies with positional draw', are invited to write to AJR (price still unclear - send no money). The new volume, in English like the first two, has about 8800 diagrams, 736 pages, 3609 'finale pictures', and copious original expository matter. The sequence of presentation is logical, namely by increasing complexity. We are advised that publication date is September 1995. The edition size is strictly limited.

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