Step 5

2 Opening / Choose the best move: A

1) **1. ♘xe5** The best move. 1. ... ♕xg5 2. hxg5 only so Black remains a piece up (2. ♘d3 ♕e7) 2. ... ♗xf2+ 3. ♔e2 ♘f4+ 4. ♔f3) 2. ♗xd8
   1. ♗xd8 ♗xf2+ 2. ♔e2 ♘f4#
   1. ♕e2 f6 (1... ♗xf2+ 2. ♕xf2) 2. ♗e3 ♘f4) 1... ♘xf2 (1... ♘6xe5 2. ♗xd8 ♗xf2+ 3. ♔e2 ♔xd8 4. ♘f3)
2) **1. ♕d3** The move takes advantage of the unfortunate position of the black queen and rook. After 1... ♘xc3 2. bxc3 ♘d5 3. c4 ♗e5 4. ♘xe5 ♕xe5 5. ♗f4 1-0
   1. ♕xe4 (perhaps spectacular but unnecessary; White does get enough material) 1. ... ♘xe4 2. ♘xe4 0-0 3. ♘xd6
   1. ♖d4 ♘xc3 2. ♖xd6
3) **1. ... ♗xd4** Superficially it looks like nothing is wrong, but this capture simply wins a piece after 2. ♗xd4 ♘xd4 3. ♕xd4 ♕g5.
   1. ... ♘xd4 Is only the same as capturing with the bishop but White does not have to capture again: 2. ♕h5 b6 3. b4 ♘xb5 4. bxc5 ♘xc3 5. ♗g5 ♘e2+ 6. ♔h1 ♘f4 7. ♕xh4 ♘xg2 8. ♔xg2 f6 9. ♗f4)
   1. ... ♗b6 prevents loss of a piece but does not win: 2. f4
4) 1. ... ♖c8 retains the pawn because 2. ♘xa7? ♗c5 3. ♖f4 ♕d8 loses material.
   1. ... ♕e5 2. a4
   1. ... ♗d6 gives the pawn back and is enough for equality.
5) **1. ... ♗d7** 2. ♗f3 c5 (2. ... ♘c6)
   1. ... ♗xe2 2. ♕xe2 0-0 (2. ... ♔f8 3. ♕f3 c6 4. ♘f5 ♘bd7 5. ♕g3) 3. ♘f5
   1. ... h6 2. ♗xf6 ♗xf6 3. ♗xg4 ♗xd4 4. ♕e2+ ♔f8 (4. ... ♕e7 5. ♕f3
6) 1. ♗**xe4** That is not the first move you look at, but it is relatively the best option. Black can develop further with 1. ... 0-0 (rather not 1. ... ♘xe4 2. fxe4 and the square f3 becomes available for the knight) or playing actively with 1. ... ♕b6 (capturing on b2 and e5 may be possible). After 2. ♖b1 0-0, Black is better.
   1. ♘xe4 This costs surprisingly a pawn after 2. ♗xe4 f5 3. ♗d3 ♗xd4.
   1. fxe4 ♘g4 wins a pawn with a good position to go with it.
7) 1**. ... ♘d7** 2. 0-0 ♘xe5 3. ♗xe5 f6
   1. ... c5 2. ♕a4+ ♘d7 3. g4
   1. ... ♕b6 2. g4 (2. ♕b3 ♕b5)
8) **1. ... e5** 2. ♕c4 ♗d6 (2. ... a6 3. ♘xe4 ♘xd5 4. 0-0-0 c6) 3. ♘xe4 ♘xe4 4. ♕xe4 0-0
   1. ... e6 2. ♗b5+ (2. dxe6 ♗xe6 3. 0-0-0 (3. ♘xe4 ♕xd4) 3. ... ♕xd4 4. ♗xd4 0-0-0 5. ♗xf6 ♖xd1+ 6. ♔xd1 gxf6 7. ♘xe4 ♗h6
   1. ... a6 2. ♘xe4
9) **1. ♘f3** 1. ... ♗g4 2. ♕e2 ♗e7 3. dxe5
   1. ♗e3 exd4 2. ♕xd4 (2. ♗xd4 ♘c6) 2. ... ♕xd4 3. ♗xd4 ♘c6 4. ♗e3 ♗e6 5. b3 0-0-0 6. ♘ge2 ♘b4 7. ♘d4 ♖xd4 8. ♗xd4 ♘c2+ 9. ♔d2 ♘xd4)
   1. d5 ♗b4 (1. ... c6)
10) 1. ♕d1 This move only comes in the picture when the alternatives are inadequate and therefore the black threats have been found. The queen is in a bad position on c2. The white position is no worse. After 1. ... ♘ge7 2. ♘a3 the knight goes to b5 and White can castle.
    1. ♕e2 ♘d4 2. ♕xa6 bxa6 3. ♘xd4 ♗xd4
    1. ♗a3
    The move from the game 1. ♘bd2 was too easy: 1. ... ♘b4
11) **1. ... d4** 2. exd4 cxd4 3. ♘b5 (3. ♘a4) 3. ... ♘c6 4. d3 a6 5. ♘a3 ♕a5+
    1. ... ♘c6 2. cxd5 exd5 3. ♗b2
    1. ... ♗e7 2. cxd5 exd5 3. ♗b2
12) **1. ♗b5** 1. ... ♗b7 2. ♗xf6 gxf6 (2. ... ♗xf6 3. ♕a4 ♖e7 4. ♗c6 ±) (2. ... ♘xf6 3. ♗xe8±) 3. ♕a4 a6 4. ♗xd7 b5 5. ♗xb5 axb5 6. ♕xb5
    1. ♘g3 h6 (1. ... ♘f8) 2. ♗f4
    1. ♖c1 c6

3 Opening / Play the best move: A

1) 1. d6 ♘xd6 (1. ... cxd6 2. ♗b3+ ♔h8 3. ♘f7+ ♖xf7 4. ♗xf7) 2. ♗b3+ ♔h8 3. ♗g5 ♕e8 4. ♗xe7 ♕xe7 5. ♘g6+ hxg6 6. ♕h3+
2) 1. ♕xd5 (1. ♕g4 ♗f6 2. c4 h5 3. ♕f4 ♗xe5) 1. ... exd5 2. ♘c6 ♗e6 3. c4 ♗d6 4. cxd5 ♔d7 5. ♘e5+ ♗xe5

6. dxe6+ ♔xe6 7. ♖xe5+
3) 1. ♕e2 ♔f8 2. b3 cxb3 (2. ... b5 3. a4 b4 4. ♘b5 ♗xb5 5. axb5)
4) 1. ♗a3 ♕d8 (1. ... ♕xa3 2. ♕e4) 2. ♗xe7 ♔xe7 3. ♖fe1
5) Drawing
6) 1. ... ♘xe4 (1. ... d5 2. ♗xd5 ♘xd5 3. ♘xd5 f5 4. ♘xe7+ ♕xe7) 2. 0-0 (2. ♘xe4 d5 3. ♗d3 dxe4 4. ♗xe4 ♗b4+ 5. ♗d2 ♖e8) 2. ... ♘xc3 3. bxc3 d5
7) 1. ... f5 (1. ... ♘f6 2. ♕e2 e4 3. ♗xe4 0-0 4. ♗d3 ♖e8 5. ♗e3 ♕a5+) 2. ♕xf5 ♘f6 3. ♕g5 e4 4. 0-0 0-0 5. c5 ♗e7 6. ♗xe4 ♘xe4 7. ♕e3 ♕d5 8. b3 ♗f6 9. ♗b2
8) Drawing
9) 1. ♗d2 (1. ♘xd5 ♘xd5 2. ♕d2 ♕b6 (2. ... ♘xf4 3. ♕xf4 g5 4. ♕e3 g4 5. ♘d2 ♗g5 6.♕c3) (2. ... h6) 3. b3 ♗a3 4. ♖cd1 ♗b4 5. ♕c1 ♘c3 6. ♘e5 ♘e2+) 1. ... ♘xc3 2. bxc3 ♘d5 3. c4 ♘b6 4. c5 ♘d5 5. c4
10) 1. ... g5 2. ♗xg5 ♘xe5 3. 0-0-0 ♕xd4 4. ♘xd4 ♗a6 5. ♗e3 (5. ♗xe7 ♖fe8 6. ♗h4 ♘d3+) (5. ♘f5 ♘d3+ 6. ♖xd3 ♗xd3 7. ♘xe7+ ♔h8=) 5. ... ♖fd8
11) 1. ♘d4 (Played was 1. ♗g2 ♘c6 2. 0-0 0-0 3. a3 ♗xc3 4. bxc3 f6 5. exf6 ♖xf6 6. ♘d4 ♘xd4 7. cxd4 ♖e8 8. ♗e4 ♕b5 9. ♖ab1 ♕a4 10. ♕g4 ♔f8 11. ♗g6 ♖e7 12. ♗h5 ♕xc2 13. ♖bc1 ♕xd3 14. ♖xc7 ♕xf1#) 1. ... ♕g6 2. ♗g2 c6 3. a3 ♗xc3+ 4. bxc3 0-0 5. f4
12) 1. ... ♘xe5 (1. ... ♘b4 2. ♘f4 ♕xd4 3. ♘f3) 2. ♘f4 ♕xd4 3. ♘f3 ♘xf3+ 4. ♕xf3 e5 5. ♘d5 ♗d6

4 Mate in two: A
1) 1. ♗f5 (1. ... ♘xc2 2. ♗xc2#) 1. ... ♕xe3 2. ♗d7#
2) 1. ♕g4+ ♖e2 2. ♕a4#
3) 1. ♗d2+ ♔g4 2. ♖g6#
4) 1. b4 ♖a1 2. ♖c1#
5) 1. h4 ♖xa2 2. hxg5#
6) 1. f4 bxc4 (1. ... ♗xe4 2. ♖c5#; 1. ... ♖c2 2. ♖ed4#) 2. ♖e5#
7) 1. ♕f7+ ♔xf7 2. ♘h6#
8) 1. ♖g6+ ♕fxg6 (1. ... ♕hxg6 2. ♕h4#; 1. ... ♔xg6 2. ♕xg7#) 2. ♕f4#
9) 1. ... ♖d3+ 2. cxd3 ♗d4#
10) 1. ♖e6 ♘xe6 (1. ... dxe6 2. ♖f7#; 1. ... ♖f8 2. ♘h6#) 2. ♗d3#
11) 1. ♕d5+ ♔xd5 (1. ... ♗xd5 2. ♘xd3#; 1. ... ♖xd5 2. ♘e4#) 2. ♖b5#
12) 1. ♘c3 c5 (1. ... g1♕ 2. ♖e4#; 1. ... ♘d5 2. ♘e2#) 2. ♘b5#

5 Mate in three: A
1) 1. ♕e5+ ♔h6 2. ♖h5+ gxh5 3. ♕f6#
2) 1. ♕h8+ ♖b8 2. ♕a1+ ♕a6 3. ♕xa6#
3) 1. ♕a5+ ♔xa5 2. axb7+ ♔b6 3. b8♕#
4) 1. ♕h6+ ♔e8 2. ♖g8+ ♔d7 3. ♕c6#
5) 1. ♕d1+ ♔h6 2. ♕h1+ ♖h4 3. ♕xh4#
6) 1. ♕a1+ ♔g6 2. ♕g1+ ♔f6 3. ♕g5#
7) 1. ♖h8+ ♔g6 2. ♕d1 b1♕ 3. ♕h5#
8) 1. ♕e5+ ♕e7 2. ♖d8+ ♔xd8 3. ♕b8#
9) 1. ♕a7+ ♖a6 2. ♖xa4+ bxa4 3. ♕c5#
10) 1. ♕g7+ ♔f5 2. ♖e5+ ♕xe5 3. ♕g6#
11) 1. ♕g8+ ♖xg8 2. f8♘+ ♔h8 3. ♖h7#
12) 1. ... ♖xb4+ 2. cxb4 ♕a2 3. ♕c2 ♕a6#

6 Mate in three: B
1) 1. ♖h2+ ♔g6 2. ♗h5+ ♔h7 3. ♗f7#
2) 1. f4+ gxf3 2. ♕f4+ ♔h5 3. ♕h4#
3) 1. b4+ ♔xb4 2. ♕d4+ ♔a5 3. ♕c3#
4) 1. g4+ ♔xh4 2. ♕f6+ g5 3. ♕xh6#
5) Drawing
6) Drawing
7) 1. ♖b8+ ♔xa6 2. ♖b6+ ♖xb6 3. ♘c5#
8) 1. ♖a8+ ♔xa8 2. ♘d7 Δ 3. ♖a2#
9) 1. ♖g5+ ♔xg5 2. ♘f7+ ♔h5 3. g4#
10) 1. ♘g4+ ♖xg4 2. ♖d5+ ♔xd5 3. ♖f5#

11) 1. ♖h6 gxh6 2. h3+ ♔h5 3. ♗f7#
12) 1. c8♘+ ♔a6 2. ♔b4 ♘d6 3. ♘c5#; 2. ... e5 3. ♘b8#

7 Mate in three: C

1) 1. ♕g8+ ♖xg8 2. ♘xg6+ hxg6 3. ♖h3#
2) 1. ♘a6+ ♖xd8 2. ♕b8+ ♖xb8 3. ♘c7#
3) 1. ♕xb8+ ♔xb8 2. ♖d8+ (2. ♖b6+? ♔c8 3. ♖b8+ ♔d7) 2. ... ♔b7 3. ♖b8#
4) 1. ♖h8+ ♔c7 2. ♖c8+ ♗xc8 3. ♕xc8#
5) 1. ♖c8+ ♖xc8 2. ♕h8+ ♔e7 3. ♘xc8#
6) 1. ♘xf6+ ♔f8 2. ♘gxh7+ ♖xh7 3. ♕g8#
7) 1. ... ♘g1+ 2. ♔h4 ♘f3+ 3. ♔h5 (3. ♔h3 ♘f2#; 3. ♗xf3 ♖h2#) 3. ... ♘f6#
8) 1. ♖xg8+ ♔xg8 2. ♕f8+ ♔xf8 3. ♖b8#
9) 1. ... ♗g2+ 2. ♔g4 ♖f4+ 3. gxf4 ♗h3#
10) 1. ♕a1+ ♔e3 2. ♕e1+ ♔d4 3. ♕c3#
11) 1. d3+ ♗xd3 2. ♕f5+ ♔xf5 3. ♗xd3#
12) 1. ♖e7+ ♔f8 2. ♖e8+ ♔xe8 3. ♕e7#

8 Thinking ahead / Mate: A

1) 1... ♗b4+ 2. ♔f1 ♕d1+ 3. ♔f2 ♗e1+ 4. ♔f1 ♗g3#
2) 1... ♕xc2+ 2. ♔d4 ♕d3+ 3. ♔c5 b6+ 4. ♔c6 ♕d7#
3) 1. ♘h6+ ♔h8 2. ♕f7 ♗e7 3. ♕g8+ ♖xg8 4. ♘f7#
4) 1. ♕xg6+ fxg6 2. ♗xd5+ ♕xd5 3. f7+ ♕xf7 4. ♖h8#
5) 1. ♕d5+ ♘xd5 2. ♗g4+ ♔e5 3. ♖f5+ ♔e6 4. exd5#
6) 1. ... ♘ca3+ 2. ♔a1 ♖c1+ 3. ♘xc1 ♘c2+ 4. ♔b1 ♘ba3#
7) 1. ♘f4+ ♔g5 2. ♘e6+ ♔g6 3. ♘f8+ ♔f7 4. ♕e6#
8) 1. ♘h7+ ♔g8 2. ♘f6+ ♔f8 3. ♖h8+ ♗xh8 4. ♕g8#
9) 1. ♖e7+ ♔xe7 2. ♘g6+ ♔f7 3. ♖xh7+ ♖xh7 4. ♕f8#

9 Thinking ahead / Mate: B

1) 1. ... ♖a2+ 2. ♔xa2 ♖b2+ 3. ♔a1 ♖a2+ 4. ♔xa2 ♕b2#
2) 1. ♘c6+ ♔b5 2. ♘a7+ ♔a5 3. ♔a3 g1♕ 4. b4#
3) 1. ... ♕a1+ 2. ♘xa1 ♘a3+ 3. ♔a2 ♘c2+ 4. ♔b3 (4. ♔b1 ♖xa1#) 4. ... ♖a3#
4) 1. ♘b6+ ♔a7 2. ♘c8+ ♔a8 3. ♕a7+ ♘xa7 4. ♘b6
5) 1. ... ♖h1+ (1. ... ♘2g4+? 2. hxg4 ♘xg4+ 3. ♔h3) 2. ♗xh1 ♕xh3+ 3. ♔g1 ♕xh1+ 4. ♔xf2 ♘g4#
6) 1. ♕xc5+ ♔xc5 2. ♗a3+ ♔c4 3. ♗b5+ (3. ♗b3+ ♔xc3) 3. ... ♔xc3 4. ♗b4#
7) 1. ... ♖c1+ 2. ♔b2 ♘d3+ 3. ♔a3 ♖a4+ 4. bxa4
8) 1. ♖b6+ ♔xc5 2. b4+ ♔d4 3. ♖d3+ ♔xc4 4. ♘e3#
9) 1. e5+ ♔xe5 2. d4+ ♔xd4 3. ♕xf4+ ♔c5 4. ♕e3#

10 Pawn endings / Breakthrough: A

1) 1. g4 ♔c5 2. f5 gxf5 3. gxh5
2) 1. b5 cxb5 (1. ... ♔d5 2. a6 bxa6 3. bxa6) 2. c6 bxc6 3. a6
3) 1. f6 gxf6 (1. ... ♔e6 2. fxg7 ♔f7 3. h6 ♔g8 4. ♔c4 ♔f7 5. ♔d5 ♔g8 6. g6 hxg6 7. ♔e6) 2. g6 hxg6 3. h6
4) 1. c6 bxc6 2. c4 ♔f4 (2. ... ♔h3 3. ♔g1) 3. b5 cxb5 4. cxb5 axb5 5. a6
5) 1. b4 cxb4 2. c5 bxc5 3. b6 axb6 4. a7
6) 1. a6 c4 2. b6
7) 1. g5 ♔h8 2. c4 bxc4 3. b5 c3 4. b6
8) 1. f5 gxf5 2. h5
9) 1. a4 (1. a3 axb4 2. axb4 ♔a6 3. ♔c6 ♔a7 4. ♔xb5 ♔b7 5. ♔c5 ♔c7 6. ♔d5 ♔b6 7. ♔e4 ♔b5 8. ♔f4 ♔xb4 9. ♔g4 ♔c5 10. ♔xh4 ♔d6 11. ♔g5 ♔e7 12. ♔g6 ♔f8=) 1. ... bxa4 2. b5 a3 3. b6+ ♔a6 4. b7 a2 5. b8♕ a1♕ 6. ♕b7# (6. ♕b6#)
10) 1. g6 b2 2. h6
11) 1. b5 (1. c5 bxc5 2. b5 c4 3. b6 c3 4. b7 c2 5. b8♕ c1♕+) 1. ... ♔f6 2. c5 ♔e6 3. c6
12) 1. a5 (1. d6? cxd6 2. a5 d5 3. axb6 d4+) 1. ... bxa5 2. d6 cxd6 3. b6 d5 4. b7 d4+ 5. ♔f3

11 Pawn endings / Breakthrough: B

1) 1. ... g4 (1. ... h4 2. gxh4 gxh4 3. d5) 2. d5 h4 3. d6 hxg3 4. d7 g2 5. d8♕ g1♕+ After 6. ♔c6, 6. ... ♕e1 wins fastest (6. ... ♕c1+ and 6. ... ♕g2+ are the other winning moves).

2) 1. d6 exd6 2. d5 fxe4 (2. ... exd5 3. exf5) 3. dxe6
3) 1. ... e3 2. fxe3 fxg4 3. ♔e4 g3 4. ♔f3 gxh2 (4. ... g2? 5. ♔f2)
4) 1. f6 gxf6 2. exf6 ♔d6 3. g5 ♔e5 4. gxh6 ♔xf6 5. ♔b3 e5
5) 1. a6 (1. b6 axb6 2. a6 ♔c6) 1. ... g4 2. b6 cxb6 (2. ... g3 3. bxa7 g2 4. a8♕+) 3. cxb6 ♔c6 4. bxa7
6) 1. a4 (1. d5? c5) 1. ... bxa4 2. d5 cxd5 3. b5 a3 4. ♔b3 (4. b6? d4+ 5. ♔b3 d3 6. b7 d2 7. ♔c2 a2) 4. ... d4 5. ♔xa3 d3 6. ♔b2
7) 1. g5 h4 2. f4 h3 3. f5 h2 4. fxg6 h1♕ 5. g7+ ♔h7 6. g8♕#
8) 1. e4 (1. f4? ♔b3 2. e4 ♔c4 3. e5 ♔xd5) 1. ... fxe4 2. f4 (2. fxe4? ♔b4 3. e5 ♔c5 4. e6 ♔d6 5. ♔c2 c6) 2. ... ♔b4 3. d6 cxd6 4. f5 ♔c3 5. ♔c1
9) 1. ♔b2 ♔d3 (1. ... ♔e3 2. e5 dxe5 3. c5 e4 4. c6 ♔f2 5. c7 e3 6. c8♕) 2. e5 dxe5 3. c5 e4 4. ♔c1 e3 5. ♔d1
10) 1. f5 (1. ♔c4 ♔b6 2. f5 exf5 3. h5 gxh5 4. g6 fxg6 5. e6 ♔c7) 1. ... exf5 (1. ... gxf5 2. h5) (1. ... ♔b6 2. h5 (2. f6 gxf6 3. exf6 ♔c7 4. h5) 2. ... gxh5 3. g6) 2. h5 gxh5 3. g6 fxg6 4. e6
11) 1. a5 (1. ♔c6 ♔c8 2. a5 bxa5 3. b6 cxb6 4. ♔xd6 ♔d8=) 1. ... bxa5 2. c5 dxc5 (2. ... a4 3. c6 a3 4. b6) 3. b6 cxb6 4. d6
12) 1. f3 (1. f4? h3 2. f5 h2 3. ♔f2 exf5 4. e6 f4 5. e7 f3 6. ♔f1 f2 7. e8♕) 1. ... h3 (1. ... ♔h2 2. f4 ♔g3 3. f5 h3 4. ♔g1 h2+ 5. ♔h1 exf5 6. e6 f4 7. e7 f3 8. e8♕) 2. f4 h2 3. f5 exf5 4. e6 f4 5. e7 f3 6. e8♕

12 Pawn endings / Key squares: A

1) 1. ♔f2! (1. ♔e2? ♔xe4) 1. ... ♔xe4 (1. ... ♔xg4 2. ♔e3! ♔g5 3. ♔d4 ♔f6 4. ♔d5 ♔e7 5. ♔e5) 2. ♔g3! ♔e5 3. ♔h4 ♔f6 4. ♔h5 ♔g7 5. ♔g5 ♔h7 6. ♔f6 ♔h6 7. g5+ ♔h7 8. ♔f7! (8. g6+? ♔h8! 9. ♔f7 stalemate) 8. ... ♔h8 9. ♔g6! (9. g6? stalemate) 1-0
2) 1. h5 (1. ♔f6 ♔h6 2. ♔e7 ♔g7 3. h5; 3. f5? gxf5 4. ♔xf5=) 1. ... gxh5 2. ♔xh5 ♔g7 3. ♔g5 ♔f7 4. ♔f5 ♔e7 5. ♔g6 1-0
3) 1. ♔c2 (1. ♔c3? ♔b5; 1. ♔a2 (Waste of time, as White has to return to the starting position) 1. ... ♔a6! 2. ♔a3? (2. ♔b2!) 2. ♔b5) 1. ... ♔c6 2. ♔d3 ♔b5 3. ♔c3 ♔c6 (3. ... ♔b6 4. ♔c4 ♔c6 5. b5+ ♔b6 6. ♔b4) 4. ♔c4 ♔b6 5. b5 ♔a5 (5. ... ♔b7 6. ♔c5) 6. b6 (6. ♔c5? ... ♔xb6 7. ♔b4; 6. b4+? ♔b6) 1-0
4) 1. ♔h4 (1. ♔g4 ♔g6 2. ♔f4 ♔f6 3. ♔e4 ♔e6 4. ♔d4 b3 5. cxb3 ♔d6) 1. ... ♔g6 2. ♔g4 ♔f6 3. ♔f4 ♔e6 4. ♔e4 ♔d6 5. ♔d4 b3 6. cxb3 ♔c6 7. ♔c4 ♔b6 8. ♔b4 ♔a6 9. ♔c5 1-0
5) 1. a3 (1. ♔a3 ♔a5 2. d6 ♔b6 3. ♔b4 ♔c6 4. ♔a5 ♔xd6 5. ♔b6 1-0) 1. ... ♔c5 2. ♔a4 ♔xd5 3. ♔b5 ♔d6 4. ♔b6 ♔d7 5. ♔b7 1-0
6) White needs six moves to take b4 and b3. Black also needs six moves to make a draw with ♔b5 after ♔xb3. White must win a tempo by holding off the black king. 1. ♔f6 (1. ♔f5? ♔g7 2. ♔e6 ♔f8 . ♔d7 ♔f7 4. ♔d6 ♔e8 5. ♔c5 ♔d7 6. ♔xb4 ♔c6 7. ♔xb3 ♔b5) 1. ... ♔g8 (1. ... ♔h6 2. ♔e5) 2. ♔e7 ♔g7 3. ♔d6 ♔f6 4. ♔c5 ♔e5 5. ♔xb4 ♔d6 6. ♔xb3 ♔c5 7. ♔a4 ♔b6 8. ♔b4 1-0
7) 1. ♔f4 (1. g8♕+? ♔xg8 2. ♔f4 ♔f8) 1. ... ♔g8 (1. ... ♔xg7 2. ♔g5) 2. ♔f5 ♔f7 3. g8♕+ ♔xg8 4. ♔g6 1-0
8) 1. b8♘+ (1. b8♕ ♖b6+ 2. ♕xb6+ ♔xb6) 1. ... ♔b6 2. ♘xc6 ♔xc6 3. ♔c4 1-0
9) Drawing
10) 1. a5 (1. ♔g6? ♔g8) 1. ... ♔g8 (1. ... bxa5 2. c5 a4 3. c6 a3 4. c7 a2 5. c8♕#) 2. axb6 axb6 3. ♔g6 ♔f8 4. ♔f6 ♔e8 5. ♔e6 ♔d8 6. ♔d6 ♔c8 7. ♔c6 b5 (7. ... ♔b8 8. ♔xb6) 8. cxb5 (8. ♔xb5? ♔b7 9. ♔c5 ♔c7) 8. ... ♔b8 9. ♔b6 ♔c8 10. ♔a7 1-0
11) 1. ♔b1 (1. ♔c3 a3 2. b4 ♔e5 3. ♔b3 ♔d5 4. ♔xa3 ♔c6 5. ♔a4 ♔b6) 1. ... a3 (1. ... ♔e5 2. ♔a2 ♔d5 3. ♔a3 ♔c5 4. ♔xa4 ♔b6 5. ♔b4) 2. b3 ♔e5 (2. ... ♔e6 3. ♔a2 ♔d6 4. ♔xa3 ♔c5 5. ♔a4 ♔b6 6. ♔b4) 3. ♔a2 ♔d5 4. ♔xa3 ♔c6 5. ♔a4 ♔b6 6. ♔b4 1-0
12) 1. f3 (1. f4 ♔f8 2. ♔xg6 ♔g8 3. f5 ♔f8 4. h5 ♔g8 5. h6 gxh6 6. ♔xh6 ♔f7) 1. ... ♔f8 2. ♔xg6 ♔g8 3. h5 (3. f4? ♔f8 4. h5 ♔g8 5. h6 gxh6 6. ♔xh6 ♔f7) 3. ... ♔f8 4. h6 gxh6 (4. ... ♔g8 5. ♔g5) 5. ♔xh6 ♔f7 6. ♔g5 1-0

13 Mini-plans / Pawn structure: A

1) 1) 1. c5 ♗xc5 2. ♗xf6 gxf6 3. ♕c1 with a winning advantage due to the weakening of the kings position.
2) 1. ♕e5+ ♕xe5 (1. ... ♕e7 2. ♘f4 (2. ♕b8+ ♕d8 3. ♕xa7 is for the braves, Black has no compensation) 2. dxe5 ♘d5 3. ♗c4 (or 3. ♖xh5). An improved pawn structure and win or a pawn is the result.
3) 1. ♘f3 (better than the game continuation 1. ♕e3 ♘f5 2. ♗xf5 exf5 3. ♕g5 g6 4. f3 ♖c7 5. ♘d3 ♔f7 6. ♘c5 ♖e7 7. ♖e5 b6 8. ♘d3 ♕d6 9. ♕e3 ♘d7 10. ♖xe7+ ♕xe7 11. ♕xe7+ ♔xe7 12. ♘b4 ♔d6 13. ♔f2 ♘b8 14. ♔g3 h6 15. ♔f4 ♔e6 16. h4).
4) 1. e5 ♘d5 2. e6 fxe6 3. ♖xe6 ♔f8 4. h3 ♘c7 5. ♖ee1 ♘a5 Worsening the opponent's pawn structure.
5) 1. dxc4 (1. bxc4 a5 resolves the double pawn but gives Black a passed pawn.)
6) 1. ♗c5 ♖fc8 2. ♗b4 Worsening the opponent's pawn structure.
7) 1. ... gxf6 (1. ... ♘xf6 2. ♘xf7 ♔xf7 3. ♕xe6+ ♔g6 4. h5#; 1. ... ♕xf6 ♗xd5 exd5 ♘g6+ ♔d7 ♘xh8)

8) 1. ... d5 2. cxd5 (2. ♘d2 ♗c2 3. ♖c1 ♖xe1+ 4. ♖xe1 ♗d3) 2. ... ♗xf3 3. ♖xe8 ♖xe8 4. gxf3 ♖d8 5. ♔g2 ♔e5 6. ♖e1+ ♔d6 7. f4 c4
9) 1. ♘xe5 ♘xe5 2. ♕d4 ♕xd4 3. cxd4. Improving the pawn structure.
10) 1. ♗a3 c5 2. ♘d5. Weakening the pawn structure of the opponent. The knight will get a square in the centre.
11) 1. c5! (1. a4 ♗d7! 2. ♖fb1 ♘xa4 3. ♖xb7 ♘xc3! 4. ♗d3 ♗c6) and now 1. dxc5 fails to 2. ♖fb1 ♘a4 ♗b5.
12) 1. ... ♘d5+ (not immediately 1. ... c4 while square the king can go to d4) 2. ♔f2 c4 3. ♗e2 c3 4. bxc3 ♘xc3. Weakening the pawn structure of the opponent.

14 Mini-plans / Pawn structure: B

1) 1. ♕b3 ♕xb3 (1. ... ♕a6 2. ♗xg7; 1. ... ♗d3 2. ♖fd1) 2. axb3 b6 (2. ... a6 3. ♗xg7) 3. ♖xa7 c5 4. ♖b7+ ♔c8 5. ♖a1 ♗d6 6. ♖a8+. Opening a line, the double pawn doesn't play a negative role. Gaining time is crucial.
2) 1. e5 dxe5 2. ♖d7 (or 2. ♘xe5) 2. ... a5 3. ♕xe5. Weakening the pawn structure of the opponent and the d-file will be opened. The rook can enter
3) 1. ... ♘b4 2. cxb4 ♕xc2 3. ♗xc2 ♗xc2. Weakening the pawn structure of the opponent and Black has the pair of bishops.
4) 1. ... 0-0 (After 1. ... ♕xf3 2. gxf3 ♘f6 3. 0-0-0 the double pawn is weak but White still has an extra pawn) 2. ♕xf6 ♖xf6 3. ♗e2 (3. f3 ♖e6+– 3. ... ♖e8+ 4. ♘e4!) 3. ... ♘xf2 4. ♖f1 ♖af8
5) 1. ... gxf6 2. ♘d2 f5. Opening the g-file is useful for Black. Black's double pawn controls centre squares.
6) 1. ♗f1 ♗e8 2. c4 (2. ♗b6 ♘f7 3. c4 ♘d6) 2. ... bxc4 3. ♗xc4+ (Resolving a double pawn)
7) 1. b4 ♘ce4 2. ♗b3 ♔f7 (2. ... ♘d5 3. ♘xd5 exd5 4. ♗e3 ♘f6 5. ♖a5 3. ♘xf5
8) 1. ... a5 Weakening the pawn structure of the opponent. A common way to shift the first pawn of the chain a2/b3/c4 to b3. Black can attack the b3-pawn, not the a2-pawn.
9) Drawing
10) 1. ... ♕a6 2. ♕xa6 (2. ♖d1 ♕xd3+ 3. ♖xd3 ♖c2 4. ♖d2 ♖bc8) 2. ... bxa6 3. ♖c1 ♖xc1+ (3. ... a4) 4. ♗xc1 a4. Opening a line, the double pawn plays no negative role. Black gets the c-file or can easily resolve the double pawn.
11) 1. ♘b2 (1. a3 ♖b5 2. bxc4 ♖a5 3. ♘b2 ♔e7 and Black's pieces are active enough) 1. ... ♘b6 (1. ... cxb3 2. axb3 ♖b7 3. ♘c4 ♔e7 4. ♖a6 or 1. ... c3 2. ♘c4) 2. c3 ♖b5 4. b4 ♘d7 5. ♘xc4. White's active pieces give more than enough compensation for the (mostly temporarily) material disadvantage. White avoids at all costs weak double pawns.
12) 1. ... ♗e6 (1. ... ♗xf3 2. ♖xf3 ♖c8 3. ♗b3 0-0 4. ♖df1 ♕d6 5. ♔b1) 2. ♗xe6 fxe6. Black accepts a double pawn to limit White's activity. Black's position is worse but can be defended.

15 Pawn endings / Pawn races: A

1) 1. a7 (1. e7? h2 2. e8♕ h1♕) 1. ... f2 2. a8♕ f1♕ 3. ♕a1+ promotion and x-ray check.
2) 1. f6 (1. g6 h3 2. g7 h2 3. g8♕ h1♕) 1. ... h3 2. f7 h2 3. f8♕ h1♕ 4. ♕xb4# promotion and mate.
3) 1. d7 (1. g7 e2 2. g8♕ e1♕) 1. ... e2 2. d8♕ e1♕ 3. ♕a5+ promotion and x-ray check.
4) 1. g6 (1. f6 e3 2. f7 e2 3. f8♕ e1♕) 1. ... e3 2. g7 e2 3. g8♕ e1♕ 4. ♕a2# promotion and mate.
5) 1. g7 (1. f7 h2 (1. ... a2? 2. f8♕ a1♕ 3. ♕a8+) 2. f8♕ h1♕) 1. ... h2 2. g8♕ h1♕ 3. ♕c4+ ♔a5 4. ♕b5# promotion and mate.
6) 1. ♔d4 ♔g4 2. b6 f3 3. ♔e3 ♔g3 4. b7 f2 5. b8♕+ luring the black king and promotion with check.
7) 1. h6 b2 2. h7 b1♕ 3. h8♕+ ♔g1 4. ♕d4+ ♔h1 5. ♕h4+ ♔g1 6. ♕f2+ ♔h1 7. ♕g2# promotion with check and mate.
8) 1. ♔e8 (the king is needed for mate) 1. ... a3 2. f7 a2 3. f8♕ a1♕ 4. ♕d6+ ♔c8 5. ♕d8# promotion and mate.
9) 1. c7 d3 (1. ... b3 2. ♔d7 b2 3. c8♕ b1♕ 4. ♕a8+ ♔b6 5. ♕b8+ promotion, chasing the king and x-ray check) 2. ♔b7 d2 3. c8♕ d1♕ 4. ♕a8+ ♔b5 5. ♕a6+ ♔c5 6. ♕c6+ ♔d4 7. ♕d6+ promotion, chasing the king and x-ray check.
10) 1. ♔d7 (1. a6? Kc6) 1. ... c4 2. a6 c3 3. a7 c2 4. a8♕+ ♔c4 5. ♕a3 shielding off the black king.
11) 1. a6 e3 2. ♔d3 ♔f3 3. a7 e2 4. a8♕+ luring the black king and promotion with check.
12) 1. ♔c6 (1. ♔b6? ♔d7! 2. ♔b7 e5 3. a5 e4 4. a6 e3 5. a7 e2 6. a8♕ no promotion with check) 1. ... ♔d8 2. ♔b7 e5 3. a5 e4 4. a6 e3 5. a7 e2 6. a8♕+ shielding off the black king and promotion with check.

16 Pawn endings / Pawn races: B

1) 1. ♔d3 (1. f5 h4 2. f6 h3 3. f7 h2 4. f8♕ h1♕+) 1. ... h4 2. ♔e2 ♔g3 3. ♔f1
2) 1. ♔g5 e4 2. h6 e3 3. h7 e2 4. h8♕ e1♕ 5. ♕h4+
3) 1. ♔g7 (1. ♔g8? e4 2. h6 e3 3. h7 e2 4. h8♕ no check on e8 possible) 1. ... e4 2. h6 e3 3. h7 e2 4. h8♕ e1♕ 5. e8+
4) 1. ♔c6 (1. ♔d6 ♔c4) 1. ... g5 2. a5 g4 3. a6 g3 4. a7 g2 5. a8♕ ♔e3 6. ♕a7+

5) 1. d6 ♔f6 2. d7 (2. h6 b3 3. d7 ♔e7 4. d8♕+ ♔xd8 5. h7) 2. ... ♔e7 3. d8♕+ ♔xd8 4. h6 b3 5. h7 b2 6. h8♕+
6) 1. ♔d6 b5 (1. ... ♔b8 2. ♔e7 b5 3. d6 b4 4. d7 b3 5. d8♕+) 2. ♔c7 b4 3. d6 b3 4. d7 b2 5. d8♕ b1♕ 6. ♕d4+ ♔a6 7. ♕a4#
7) Drawing
8) Drawing
9) 1. ♔a5 (1. ♔b5? b3 2. axb3 ♔xh4 3. ♔c4 ♔g4 4. b4 h5 5. b5 h4 6. b6 h3 7. b7 h2 8. b8♕ h1♕) 1. ... ♔xh4 (1. ... b3 2. axb3 ♔xh4 3. b4 ♔g3 4. b5 h5 5. b6 h4 6. b7 h3 7. b8♕+ ♔g2 8. ♕g8+ ♔h1 (8. ... ♔h2 9. ♕g4) 9. ♕f7 ♔g1 10. ♕g6+ ♔h1 11. ♕f5 ♔g1 12. ♕g4+ ♔h2 13. ♔b4) 2. ♔xb4 ♔g3 3. a4 h5 4. a5 h4 5. a6 h3 6. a7 h2 7. a8♕
10) 1. ♔c6 (1. ♔a6? ♔e3 (1. ... ♔f3? 2. c4 ♔e4 3. c5 ♔d5 4. ♔b5 a6+ 5. ♔b6 a5 6. c6) 2. c4 ♔d4; 1. c4? a5!) (1. ♔xa7? ♔e3 2. ♔b6 ♔d4 3. ♔b5 ♔c3) 1. ... ♔e3 2. c4 a5 3. ♔b5 ♔d4 4. c5 a4 5. c6 a3 6. c7 a2 7. c8♕ a1♕ 8. ♕h8+ ♔d3 9. ♕xa1
11) 1. e6 (1. h6 d2 2. h7 d1♕ 3. h8♕ ♕c2+ 4. ♔d7+ ♔b7) 1. ... d2 2. e7 d1♕ 3. e8♘ (3. e8♕ ♕c2+ 4. ♔d7+ ♔b7) 3. ... ♕c2+ 4. ♘c7+ ♕xc7+ 5. ♔xc7 f4 6. h6 f3 7. h7
12) 1. ♔f6 c3 (1. ... g4 2. e7 g3 3. e8♕ g2 4. ♕h5+) 2. e7 c2 3. e8♕ c1♕ 4. ♕h5+ ♔g2 5. ♕xg5+ ♕xg5+ 6. ♔xg5 ♔f3 7. ♔f5! ♔e3 8. ♔e5 ♔d3 9. ♔d5 ♔c3 10. ♔c5 ♔b2 11. a4

17 Pawn endings / Pawn races: C

1) 1. ♔b6 (1. ♔b5 f4 2. a5 f3 3. a6 f2 4. a7 f1♕+ 5. ♔b6 ♕f3) 1. ... f4 (1. ... ♔xa4 2. ♔c5) 2. a5
2) 1. ♔h2 (1. e5? g5 2. e6 g4 3. e7 g3 4. e8♕ g2+ 5. ♔h2 g1♕+ 6. ♔h3 ♕g3#) 1. ... g5 (1. ... ♔f3 2. e5) 2. ♔h3 ♔f3 3. ♔h2! g4 (3. ... ♔xe4 4. ♔g3) (3. ... ♔f2 4. ♔h3) 4. ♔g1! ♔xe4 5. ♔g2
3) 1. a5 ♔b5 (1. ... h5 2. a6 ♔b6 (2. ... ♔c7) (2. ... h4 3. ♔b8)) 2. ♔b7 ♔xa5 3. ♔c6
4) 1. ♔g6 (1. d5 ♔f5) (1. ♔f6 h4 2. d5 h3 3. d6 h2 4. d7 h1♕ 5. d8♕ (5. ♔e7 ♕b7 6. ♔e8 ♔f5 7. d8♕ ♔e6) 5. ... ♕h4+) 1. ... h4 2. d5 h3 3. d6 h2 4. d7 h1♕ 5. d8♕
5) 1. ♔d7 (1. c4? ♔d6 (1. ... g5? 2. ♔d7)) (1. ♔e7? g5 2. c4 g4 (2. ... ♔d4? 3. ♔d6) 3. c5 ♔d5) 1. ... ♔d5 (1. ... g5 2. c4 ♔d4 3. ♔d6! ♔xc4 4. ♔e5) 2. c4+! ♔xc4 3. ♔e6 ♔d4 4. ♔f5
6) 1. ♔b6 e5 2. ♔c5 a5 3. ♔d6 ♔c8 4. ♔xe5
7) 1. ♔d3 a5 (1. ... ♔b2 2. ♔xd4 a5 3. c4) 2. c4 (2. ♔xd4? a4 3. c4 ♔b3) 2. ... ♔b4 (2. ... a4 3. c5) (2. ... dxc3 3. ♔xc3 a4 4. ♔c2) 3. ♔xd4 a4 4. ♔d3! (4. c5? a3 5. c6 a2 6. c7 a1♕+) 4. ... ♔b3 (4. ... a3 5. ♔c2) 5. c5
8) 1. ♔h8 f2 (1. ... b2 2. g7 b1♕ 3. g8♕+ ♔c7 4. ♕g7+ ♔d6 5. ♕g6+ ♕xg6) 2. g7 f1♕ 3. g8♕+ ♔c7 4. ♕f7+ ♕xf7
9) 1. d6 ♔b6 2. c4 g3 3. c5+ (3. d7? ♔c7 4. c5 g2 5. d8♕+ ♔xd8) 3. ... ♔c6 4. d7 ♔xd7 5. ♔b7 g2 6. c6+
10) 1. b6 (1. c6? ♔e3 2. c7 h1♕+ 3. ♔xh1 ♔f2 4. c8♕ g2+ 5. ♔h2 g1♕+ 6. ♔h3 ♕g3#) 1. ... ♔e3 2. b7 h1♕+ 3. ♔xh1 ♔f2 4. b8♕ g2+ 5. ♔h2 g1♕+ 6. ♔h3
11) 1. b6+ (1. ♔g7? h2 2. b6+ ♔b8! 3. f6 h1♕ 4. f7 ♕g1+ 5. ♔h7 ♕c5 6. ♔g7 ♕g5+ 7. ♔h7 ♕f6 8. ♔g8 ♕g6+ 9. ♔f8 ♔b7 10. ♔e7 ♕g7 11. ♔e8 ♔c6 12. b7 ♕e5+ 13. ♔d8 ♕c7+ 14. ♔e8 ♕xb7 15. ♔f8 ♔d6 16. ♔g8 ♕g2+) (1. ♔e7? h2 2. b6+ ♔xb6 3. f6 h1♕ 4. f7 ♕h7 5. ♔e8 ♔c6 6. ♔f8 ♔d6 7. ♔e8 ♕e4+ 8. ♔f8 ♕g4) 1. ... ♔xb6 (1. ... ♔b8 2. ♔e7 (2. ♔e6? h2 3. f6 h1♕ 4. f7 ♕e4+! 5. ♔d7 ♕b7+ 6. ♔e8 ♔c8 7. f8♕ ♕d7#) 2. ... h2 3. f6 h1♕ 4. f7) 2. ♔g7! h2 3. f6 h1♕ 4. f7
12) 1. e5+ (1. a6? c2 2. e5+ ♔f7 3. e6+ ♔f6 4. e7 c1♕ 5. e8♕ ♕c7+) 1. ... ♔f7 2. e6+ ♔f6 3. e7 ♔xe7 4. a6 c2 5. a7 c1♕ 6. a8♕

18 Pawn endings / Defending: A

1) 1. ... g5 (1. ... g6? 2. h6 g5 3. h7 ♔g7 4. ♔xg5 ♔xh7 5. ♔f5; 1. ... ♔e6 2. ♔g5 ♔f7 3. ♔f5) 2. h6 ♔g6 3. h7 ♔xh7 4. ♔xg5 ♔g7
2) 1. ♔b2 (1. b4? ♔c2!) 1. ... d4 2. b4 d3 3. b5 ♔e2 4. b6 d2 5. b7 d1♕ 6. b8♕
3) 1. ♔d3 (1. ♔d5 ♔g6 2. ♔e6 ♔h5 3. ♔f6 ♔h4 4. ♔f5 ♔xh3 5. ♔xg5 ♔g3 6. ♔h5 ♔xf3 7. ♔h4 ♔g2 8. ♔g4 f3; 1. ♔d4 ♔g6) 1. ... ♔g6 2. ♔e2 ♔h5 3. ♔f2 ♔h4 4. ♔g2
4) 1. ... f6 (1. ... ♔f6? 2. g5+ hxg5+ 3. ♔g4 ♔g7 4. ♔xg5) 2. ♔e4 ♔e8 3. ♔f5 ♔f7
5) 1. h4! (1. c8♕+ ♔xc8 2. h4 ♔d7; 1. h3 ♔xc7) 1. ... gxh3 2. c8♕+ ♔xc8
6) 1. ... ♔c5 (1. ... e5 2. g4 ♔c5 3. g5) 2. dxe6
7) 1. f3 (1. ♔a3 g4; 1. f4 h4 2. gxh4 gxf4 3. h5 f3 4. h6 f2 5. h7 f1♕) 1. ... ♔d3 2. h4 gxh4 3. gxh4 ♔e3 4. ♔b2 ♔xf3 5. ♔c2 ♔g3 6. ♔d2 ♔xh4 7. ♔e2 ♔g3 8. ♔f1
8) 1. ... f5+ (1. ... gxh5+ 2. ♔xh5 ♔b6 3. ♔g6 ♔b5 4. ♔xf6 ♔xb4 5. ♔e7 ♔c5 6. ♔e6 and White wins.) 2. ♔g5 gxh5 3. ♔xh5 ♔b6 4. ♔g5 ♔b5 5. ♔xf5 ♔xb4 6. ♔e4
9) 1. a5 (1. c5+ bxc5+ 2. ♔c4 c6 3. dxc6 ♔xc6 4. ♔c3 ♔d5 5. ♔c2 ♔c4 6. a5 ♔b4 7. ♔b2 c4 8. ♔c2 c3 9. ♔c1 ♔xa5 10. ♔c2 ♔b4; 1. ♔c3 ♔c5 2. ♔b3 b5 3. cxb5 axb5 4. a5 (4. axb5 ♔xb5 5. ♔c3 ♔c5 6. d6 cxd6) 4. ... ♔xd5 5. ♔b4 ♔c6 6. a6 ♔b6 7. a7 c5+) 1. ... bxa5 2. c5+ ♔e7 3. ♔c4

10) 1. ... ♔d7! (1. ... ♔e7 game *Kamali-Van Duyn Schagen, 2004* 2. ♔f5 ♔f8 3. ♔f6 ♔e8 4. e6 ♔f8 5. ♔e5) 2. ♔d5 ♔c7 3. ♔d4 (3. e6 f6 4. e7 ♔d7 5. e8♕+ ♔xe8 6. ♔c6 f5 7. ♔xb6 f4 8. ♔a7 f3 9. b6 f2 10. b7 f1♕ 11. b8♕+) 3. ... ♔d7 4. ♔e4 ♔e6
11) 1. ♔h2! (1. ♔g2 ♔h4 2. ♔h2 f3 3. ♔g1 ♔xh3) 1. ... ♔f5 2. ♔g2 ♔e5 3. ♔f1 ♔f6 4. ♔g2 ♔f5 5. h4 ♔g6 6. ♔h2
12) 1. ♔d6 (1. b3 ♔a5! 2. ♔xb7 ♔b4 3. ♔c6 a5 4. ♔b6 ♔xb3 5. ♔xc5 a4; 1. ♔b8 ♔b6 2. ♔a8 a5 3. ♔b8 ♔c6 4. ♔a7 (4. b3 b5) 4. ... a4) 1. ... b6 2. ♔c7 ♔a5 (2. ... b5 3. ♔c6! (3. cxb5+ ♔xb5)) 3. ♔b8

19 Tactics / Seventh rank: A
1) 1. ... ♖xe2 2. ♖xe2 ♕xh2+ 3. ♖xh2 ♖xh2#
2) 1. ♖b1 ♘a6 2. ♖bb7 ♖c1+ 3. ♔h2
3) 1. ♖h7 ♖b6 2. ♖eg7 ♖e6 3. ♖g8+ (3. ♖h8+) 3. ... ♖e8 4. ♖xe8+ ♔xe8 5. ♖h8+
4) 1. ... ♖ee2 2. ♖d1 ♖xg2+ 3. ♔f1 ♖ef2+ 4. ♔e1 ♖g1#
5) 1. c4 ♗xc4 2. ♗f1 ♗xf1 3. ♕xf7+
6) 1. ♖f7 ♖g8 2. ♖xg7 ♕xe5 3. ♖xh7#
7) 1. ♖e8 ♖xe8 (1. ... ♔g8 2. ♖xd8) 2. ♗d4+ ♔g8 3. ♖g7+ ♔h8 4. ♖xg6+
8) 1. ♖c7+ ♔d8 2. ♘c6+ ♗xc6 3. ♖b7+ ♔c8 4. a8♕#
9) 1. ♘h7+ ♔g8 2. ♗d5+ ♔h8 3. ♘f8 h1♕ 4. ♘xg6#
10) 1. ♖de7+ ♔d8 2. ♖h7 a2 3. ♖eg7 a1♕ 4. ♖h8#
11) 1. ♗b2 ♖c2 2. ♗a3+ ♔g8 3. ♗e7 (3. ♖aa8? ♖f6 4. ♖xe8+ ♔h7; 3. ♖e7 ♖xe7 4. ♗xe7 f6) 3. ... ♖e5 4. ♖xe8+ ♔h7
12) 1. ♖d7 ♖g8 (1. ... ♖f5 2. ♖h8+ ♖f8 3. ♖e7+ ♔d8 4. ♖xf8#) 2. ♖d3 ♔f8 (2. ... b1♕ 3. ♖e7+ ♔f8 4. ♖xf3#) 3. ♖f7+ (3. ♖xf3+? ♔e8 4. ♖d3 loss of time) 3. ... ♔e8 4. ♖e7+ ♔f8 5. ♖xf3#

20 Strategy / Seventh rank: A
1) 1. ♖d7 ♖b8 2. ♗d6
2) Drawing
3) 1. ♖d8+ ♔h7 2. ♖d7
4) 1. ♖c4 Δ 2. ♖c7
5) 1. ♖ad1 ♖d5 2. c4
6) 1. ♗b6
7) 1. ... ♖g8
8) 1. ... ♖e8+ Δ 2. ... ♖e7
9) 1. ... ♖e8 Δ 2. ... ♖e7
10) 1. ... ♖c8 Δ 2. ... ♖c7
11) 1. ... ♖c8 Δ 2. ... ♔f8 Δ 3. ... ♔e8
12) 1. ... ♖c8 2. ♖xb7 ♖c1+ 3. ♔g2 ♖c2+

21 Discovered attack / Clearing: A
1) 1. ♖xd7 (1. ♘g6+ fxg6 2. ♖xd7 ♕a8) 1. ... ♖xd7 2. ♘g6+
2) 1. ... ♘xd5 2. cxd5 exf4
3) 1. ... ♘g3+ 2. hxg3 (2. ♔g1 ♘e2+) 2. ... ♗xg2+ 3. ♔xg2 ♖xd4
4) 1. e5 ♘xe5 2. ♘xe5 ♗xe5 3. ♗xa8
5) 1. ... ♖xe3 2. fxe3 (2. ♘xf6 ♖e2) 2. ... ♘f3+
6) 1. ♖xc6+ (2. ♗h3 ♖xa3+) 2. ... bxc6 2. ♗h3+
7) 1. ... ♘fd7 2. ♖b4 e4
8) 1. d7+ ♘bxd7 2. ♘d6+ ♗xd6 3. ♗xa6
9) 1. ♗xc7 ♕xc7 2. ♘b5 ♕b6 3. ♕xg4
10) 1. ♘f6+ (1. ♘g5 ♕xc2 2. ♕h5 (2. ♗d3 ♕xd1+ 3. ♖xd1 h6) 2... ♗xg5 3. ♗xf7+ ♔h8 4. ♗xe8 ♖xe8) 1... gxf6 2. ♗xf7+ ♔xf7 3. ♕xa4
11) 1. ♗xf6 ♗xf6 2. ♘g5 ♗xg5 3. ♗xb7
12) 1. ... ♕xa1 2. ♖xa1 ♗h2+ 3. ♔xh2 ♖xa8

22 Discovered attack / Eliminating the defence: A
1) 1. axb7 ♕xb7 2. ♘xf6+
2) 1. ... ♗f2 2. ♖exf2 (2. ♕xg8+ ♕xg8 3. ♖exf2 ♖d1+ 4. ♖f1 ♖xf1+ 5. ♖xf1 ♕c4) 2. . ♖d1+ 3. ♖f1 ♕xg2#
3) 1. ... ♖xd2 2. ♖xd2 ♗b5+ 3. ♔g2 ♖xc1
4) 1. ... f5 2. ♗xc6 (2. ♗f4 ♕d8 3. ♖ad1 fxe4 4. ♕xe4 ♕d5) 2. ... ♗xf2+ 3. ♖xf2 ♕xd3

5) 1. ♘f5+ (1. ♖xg6+ $2 ♔xg6 2. ♕xe7 ♖f1#) 1. ... gxf5 2. ♖g6+ ♔xg6 (2. ... ♔f7 3. ♖g7+ ♔xg7 4. ♕xe7+) 3. ♕xe7
6) 1. ♖xd4 (1. ♖g3+? ♔f8 2. ♕xf4 ♘xe2+) 1. ... cxd4 2. ♖g3+
7) 1. ♘d8 h6 (1. ... ♖xd8 2. ♕e8+ ♖xe8 3. ♖xe8#; 1. ... ♗xd8 2. ♖e8#) 2. ♘xb7 ♖xa4 3. bxa4
8) 1. ... b5 2. ♘a5 (2. ♖d2 bxc4) 2. ... ♘e4+
9) 1. ♗xc6 ♗xc6 2. ♘d5 ♕xd2 (2. ... ♖xd5 3. ♕xa5) 3. ♘xe7#
10) 1. ... ♕c3 (1. ... ♕b4 2. ♕a1) 2. ♘b3 (2. h3 ♕xd4) 2. ... ♘f3+
11) 1. b5 ♖c5 (1. ... ♗h4 2. ♕h2 (2. ♕xh4)) 2. ♘h5+
12) 1. ... ♘e1 2. ♖xf7 (2. ♕xe1 ♖xf2 3. ♕g1 ♖f1) 2. ... ♕f1+ 3. ♖xf1 ♖xf1#

23 Discovered attack / Eliminating the defence: B
1) 1. ♖xe5 (1. ♘xf6+ ♗xf6) 1. ... dxe5 2. ♘xf6+
2) 1. ♘xd6+ cxd6 2. ♖c8+ ♖xc8 3. ♕xb5+
3) 1. ♖xc7+ ♔xc7 2. ♖c5+
4) 1. f4 ♗d6 (1. ... ♗a1 2. ♕b1) (1. ... ♕xc2 2. fxe5+ ♔xe5 3. ♖xc2) 2. ♕b2+ ♔f7 3. ♖xc5
5) 1. ♖xe6+ fxe6 (1. ... ♗xe6 2. ♗b5+) 2. ♗xg6+
6) 1. ... ♕xf1+ 2. ♗xf1 ♗xa2+
7) 1. b4 cxb3 2. ♗xg7+
8) 1. ... g5 2. ♗d2 ♘g3+
9) 1. ... ♗xe5 2. dxe5 ♕c5+
10) 1. ♕xh6 gxh6 2. ♘f7+ ♔g8 3. ♘xh6#
11) 1. ♘g5 f6 2. ♗c4+
12) 1. ... ♕xf3 (1. ... cxd5? 2. exd5 ♕xf3 3. gxf3 exd5 4. ♘d4+) 2. gxf3 exd5

24 Discovered attack / Setting up a battery: A
1) 1. ... ♘c7+ 2. ♔a5 ♘xd5+ 3. ♔b5 ♘c3#
2) 1. ... ♕h8+ 2. ♔c7 ♘e8+ 3. ♔b7 ♕xe5
3) 1. ... ♕d3+ 2. ♔g2 ♘f4+ (2. ... ♘e3+? 3. fxe3+)
4) 1. ... ♘c2 2. ♖b1 ♘e1
5) 1. ... ♗d4 2. ♕d2 ♗xg1
6) 1. ♘c8+ ♔a8 2. ♘e7+ ♔a7 3. ♘xc6#
7) 1. ♘d4 ♕b6 2. ♘e6+
8) 1. ... ♕e2+ 2. ♔h3 ♕f1+ 3. ♔g4 ♖xf4+ 4. exf4 ♕xb5
9) 1. ♘c5 ♕b6 2. ♘xd7
10) 1. g3 ♕h3 2. g4
11) 1. ... ♖b4 2. ♕a3 ♖g4 3. ♕b3 ♖xg5
12) 1. ... ♕f1+ 2. ♔h4 (2. ♔g3 ♕f3+ 3. ♔h4 ♕g4#) 2. ... ♕f4+ 3. ♔h5 ♗f3+ 4. ♔g6 ♕xd4

25 Pin / Clearing: A
1) Drawing
2) Drawing
3) 1. c4 bxc4 2. ♘c3
4) 1. e6 fxe6 (1. ... ♕xe6 2. ♘e5) 2. ♘e5
5) 1. ♗d1 ♖5h6 2. ♖b3
6) 1. ♘xc6 bxc6 2. ♗xe5
7) 1. e6 fxe6 2. ♘e5
8) 1. c5 bxc5 2. ♗b5 ♘e4 3. ♘xc6 ♘xc3 4. ♘xb4+
9) 1. d5 ♖gd8 2. ♕d4
10) 1. ... ♗xe2 2. ♖xe2 ♖xb3
11) 1. ... ♘d2+ 2. ♘xd2 ♖xf7
12) 1. ... ♘xc3 2. bxc3 ♕xd4

26 Pin / Eliminating the defence: A
1) 1. ♖xe7 ♖xe7 2. ♗xf6
2) 1. ... b3 2. axb3 ♘d8
3) 1. ... ♗xf3 2. gxf3 e5
4) 1. ♗xe7 (1. ♖e1? ♘c5) 1. ... ♖xe7 2. ♘d6
5) 1. ♘d5 ♘xd5 2. ♗b5

6) 1. ... ♘e5 2. ♕e2 (2. ♘f6+ ♗xf6 3. ♕xd5 ♖xd5) 2. ... f5
7) 1. ♖b6 (1. ♖a7? ♘c7) 1. ... ♘c5 2. ♖bb8 ♘d7 3. ♖xd7
8) 1. ... ♖g8 2. ♕c5 ♖xd3
9) 1. ... ♗b2 2. ♖c2 ♗d4
10) 1. ♕xe7 ♖xe7 2. ♗f5
11) 1. ♖xd4 exd4 2. ♕f5 (2. ♕e4 ♗xd5)
12) 1. ... ♘c4 2. ♖xc4 ♕xe5

27 Pin / Eliminating the defence: B
1) 1. ♖xe6 fxe6 2. ♖f3
2) 1. ♖xe4 dxe4 2. ♗c4
3) 1. ... ♘xd4 2. exd4 ♗h6
4) 1. ♘d6+ ♗xd6 2. ♕xf5
5) 1. ♖xg6 (after 1. ♕b3, to threat ♖xg6, Black has the simple 1. ... ♘e7 or the much better 1. ... ♖d1 2. ♖xg6? and now 2. ... ♖e3 or 2. ... ♖ee1) 1. ... fxg6 2. ♕b3
6) 1. ... ♗xc4+ 2. bxc4 ♖b2
7) 1. ♘xe5+ fxe5 2. ♗g3
8) 1. ♗e4 ♖d2 2. ♖c1
9) 1. ♕f5 ♘f6 2. h5
10) 1. b4 ♗b6 (1. ... ♗xb4 2. ♗xb4) 2. ♖c4
11) 1. ♕c3 f6 2. ♗c4
12) 1. ... ♘g3+ 2. hxg3 ♕h5+ 3. ♘h2 ♕xe2

28 Pin / Targeting: A
1) 1. ♖e8+ ♔h7 2. ♕xf5+ ♗xf5 3. ♖xa8
2) 1. ♕b1+ ♔h8 2. ♕a2
3) 1. ... ♕c5 2. ♗b3 e5
4) 1. ... e4 2. ♘g5 e3
5) 1. ♕c8+ ♔e7 2. ♖xd5
6) 1. b4 ♘a4 2. b5
7) 1. ♕b7 ♖f8 2. b5
8) 1. ... ♖a8 2. ♕xb6 ♗xb3
9) 1. ♗b3 ♖d8 2. ♕xe4
10) 1. ♘e3 ♕a8 2. ♘c2
11) 1. ♘c4 ♕f8 2. ♘b6 (2. ♘e3? ♘xe3 3. ♕xd8 ♘xd1)
12) 1. ♕e4+ (1. ♖b7? ♕xb7) 1. ... ♔h8 2. ♖b7

29 Attacking a pinned piece: A
1) 1. ... ♗e8 2. ♕xc7 ♗xb5+
2) 1. ... ♖d6 (1. ... ♖ac8 2. ♖xc8; 1. ... ♖a6 2. ♖e6 (2. ♖dc1? ♖c8) 2. ♖dc1 ♖c8
3) 1. ... ♕d5 2. ♗xh3 (2. ♖g1 ♕f3) 2. ... ♕f3
4) Drawing
5) Drawing
6) 1. ♗d4 ♘a6 2. b4 ♗xd4 3. ♕c8+ ♘d8 4. ♕xd8+ ♔f7 5. ♕xd4
7) 1. ... ♘h4+ 2. gxh4 ♖xf4
8) 1. ... ♘d7 2. ♕d6 ♘b8 3. ♕xe5+ f6
9) 1. ♘e7+ ♔h8 2. ♘c6
10) 1. ♗b6! (1. c3? ♗e5 2. ♖xd5 exd5 3. ♗b6 ♔d7 (3. ... ♖e7 4. ♗d4 (4. ♗c5 ♖c7); 1. ♖e4? ♗e5=) 1. ... e5 2. ♖xd4! (2. ♗xd4? ♖ed8!)
11) 1. ... ♘c5 2. ♖e3 ♘xe4 (2. ... ♕xd4 3. ♘f6+) 3. ♖xe4 ♕xd4
12) 1. f4 ♖hf8 (1. ... ♖bf8 2. ♕e6) 2. ♕e6

30 Opening / Choose the best move: B
bold = correct move
bold + italic = acceptable move
1) **1. e5**
The recommended move (theory as it is called). It is clear that White has played the ♘d4xc6 the previous move. The consequence is the advance of the e-pawn. The condition is that White knows sufficient theory. The main

line continues 1. ... ♕e7 2. ♕e2 ♘d5 3. c4 ♗a6. The pieces of both White and Black are somewhat in the way. Resolving that without sufficient knowledge is a bridge too far for a student of the 5th step.

1. ♘c3

A safe move, even with insufficient theoretical knowledge. White abandons the hope for advantage. Black plays 1. .... ♗b4 2. ♗d3 d5. Both sides can finish the opening with normal healthy moves.

1. ♗g5

The pin is harmless. Black plays 1. ... h6

2) 1. ... ♗e7

Not good. White does play 2. e5 now Black has to sacrifice a pawn with 2. ... ♘d5. Returning to g8 is hardly an option. White develops with 3. ♗d3.

1. .... ♗b4

The theoretical move. Healthy development because the advance e5 is out of the question (2. e5 ♕e7). Capturing on c3 is not directly intended but White is forced to protect e4 with 2. ♗d3 (2. ♕d4 ♕e7).

1. ... d5

Just possible. Black must play accurately. See next position.

3) 1. ♗d3

A development move but harmless. Black also develops with 1. ... ♗b4 or 1. ... ♗d6.

1. e5

Not to be recommended. See position 5.

1. exd5

The best move although Black is not really worse. See next position.

4) 1. ♗d3

Black can position his pieces relatively active. He starts with 1. ... c6 and after 2. 0-0 ♗d6. A check is not scary: the bishop from c8 can go to e6. In such positions the knight on c3 is a bit clumsy placed. It looks at the protected centre pawn on d5.

1. ♗b5+

A quick development is needed. Black holds with 1. ... ♗d7 2. ♗xd7+ ♕xd7 3. 0-0 ♗e7 4. ♗g5 c6 5. ♗xf6 ♗xf6 6.. ♖e1+ ♗e7 7. ♕e2. White's play is based on preventing castling but that doesn't work. Black can choose from 7. ... ♖c8 (♖c7 - 7. ... ♖b8 8. ♕e5 is a mistake) or 7. ... f5 to play ♔f7.

1. ♗g5

Not dangerous. Black plays 1. ... c6 and 2. ... ♗e7. Black has a centre pawn!

5) 1. ... ♕e7

White can protect the pawn on e5 easily with 2. f4 and then the queen on e7 is in the way of the bishop.

1. ... ♘d7

Not bad but 2. f4 is sufficient.

1. ... ♘g4

After this move it is White who has trouble to keep equal chances (if possible). See next position.

6) 1. ♗f4

Black gets an advantage with 1. ... f6 2. ♕e2 ♗c5 or 2. exf6 ♕xf6 a position that will come back later.

1. ♕e2

This move fails because of 1. ... ♗c5 2. ♘d1 0-0. White will not have the time to chase away the knight from g4.

1. ♕d4

Absolutely necessary. The black bishop must be kept away from c5. Attacking e5 is the best Black can do: 1. ... ♕e7 2. ♗f4 f6 3. 0-0-0 fxe5 4. ♕a4.

7) **. ... 0-0**

This healthy development move is probably the best. After 2. ♗e2 (more or less the only move because Black threatens to attack the e-pion with ♖e8). With 1. ... f5 Black can keep the pressure on the e-pawn for a while. Winning the e-pawn with 2. ... ♕g5 is less good: 3. 0-0 ♘xe5 4. ♘a4 ♘d7 5. ♘xc5 ♘xc5 6. ♗xc7 because it leads to a worse position (bishop pair and a better pawn structure for White) 3. 0-0 (but not 3. h3 because of 3. ... f4) 3... a5 (to keep ♗c5 on the diagonal to the king). Nice position for black.

1. ... f6

A good move for Step 5 even though White can equalize and that's only possible with 2. ♘a4. Capturing on f6 leads after 2. ... ♕xf6 to position 9. Much stronger is 2. ... 0-0 with a winning position.

1. ... ♕e7

This move is acceptable if the black player can foresee what will follow. White plays 2. ♗e2 ♘xe5 3. ♘xd5 and now there is nothing else then to sacrifice an exchange: 3. ... cxd5 4. ♕xd5 0-0 5. ♕xa8 c6! 6. ♕b8 (only move!) with equal chances. White can avoid the complications with 5. ♕xe5 and even then it's even.

8) **1. ... Bxf2+**

Winning a pawn by force. Black makes use of the unprotected knight: 2. ♗xf2 ♘xf2 3. ♔xf2 ♕h4+.
1. ... ♗b4+
This check loses time. After 2. c3 ♗e7 Black can no longer profit from the knight on a4.
1. ... ♕e7
This move seems odd but after 2. ♘xc5 ♕xc5 3. ♗e2 ♕b4+ wins a pawn. White has compensation after 4. c3 ♕xb2 5. 0-0. The first line (1. ... ♗xf2+) is definitely a better choice.

9) 1. ♕d2
Usually the normal move but here the pressure on f2 is too powerful after 1. ... 0-0.
1. ♕e2+
Putting the queen on the same file as the king doesn't look right but it is as good as the next possibility. After 1. ... ♔f7 (1. ... ♔d8 2. 0-0-0 and the black king is badly placed after 2... ♖e8 3. ♕c3 or 2. ... ♘xf2 3. ♘xd5) White must continue with 2. ♕f3.
1. ♕f3
Exchanging queens is the lesser evil. After castling kingside Black has the more active position.

31 Opening / Choose the best move: C

1) **1. ... ♘xb3** a necessary intermediate move 2. axb3 exd4.
1. ... exd4? fails to the double attack 2. ♕e1+.
1. ... ♗b6 costs a pawn although black gets some play (White hasn't quite finished development yet), both after 2. dxe5 as well after 2. ♖e1 0-0 3. dxe5 dxe5 4. ♖xe5) 2. ... dxe5 3. ♘xe5 0-0-0 4. ♕g4+ ♔b7 5. ♘d7.

2) **1. ... d4** fine because the knight doesn't have a good square to go to. (2. ♘b1 ♗b4+ 3. ♗d2 dxe3) 2. exd4 after the alternative, Black can weaken the white pawn structure. 2. ... exd4 3. ♕e2+ (3. ♘b5 ♗b4+ 4. ♗d2 ♕e7+ 5. ♕e2 ♗xd2+ 6. ♘xd2 ♗e6) 3. ... ♗e7 4. ♘e4 0-0 5. ♕d3 ♘xe4 6. ♕xe4 ♗b4+.
1. ... ♗b4 White can largely limit the disadvantage with 2. cxd5 ♘xd5 3. ♗d2 and the same goes for the third choice ♗e6.
1. ... ♗e6 2. cxd5 ♘xd5 3. ♗d2.

3) **1. ... c6** Black has several good moves, logical because White is attacking with too few pieces. Chasing back pieces is a good strategy. Black only has to calculate that 2. ♘c7+ (2. ♘b6 ♕xb6) 2. ... ♕xc7 3. ♕xf7+ ♔d8 is harmless. Other acceptable moves are 1. ... f6 and 1. ... ♘h6. White must take care of his knight on d5.
1. ... ♘gf6 wins no tempo because White just trades. After 2. ♘xf6+ ♘xf6 3. ♕b3 ♕e7 there's nothing wrong. Equal position.
1. ... ♗d6 This move is no good. White wins material with the discovered attack 2. ♘b6 (don't greedily take a pawn with 2. ♘xc7+ because of 2. ... ♕xc7 3. ♕xf7+ ♔d8 4. ♕g7 ♘df6 5. ♕xh8 ♕xc4 and White is completely undeveloped) 2. ... ♘gf6 3. ♘xa8.

4) 1. ♘**xe5** necessary because after other moves Black has no problems (to blame is the passive development of the bishop to e2) 1. ... ♘xe5 2. d4 ♗d6 3. f4 ♘c6 4. e5 and now White's a little better after 4. ... ♗b4 5. exf6 ♕xf6 6. ♘b5 ♗a5 7. c3. The bishop on a5 has little future for the time being.
1. ♘a4 White wants to exchange the bishop, but it takes time. Black can play 1. ... ♗e7 and continue developing. The knight has to go back sometime. Sharper is 1. ... ♘xe4 2. d3 (or 2. ♘xc5 ♘xc5 3. ♘xe5 ♘xe5 4. d4 d6 with insufficient compensation for the pawn) 2. ... ♘xf2 3. ♖xf2 ♗xf2+ 4. ♔xf2 d5. Usually the exchange of two light pieces for rook and pawn is not good because all active pieces disappear from the board. This is different here because of the strong centre and the low activity of all white pieces.
1. d3 Black can become active with 1. ... d5. White has developed his f1 bishop too passively.

5) **1. cxd5** The black advance d5 in the centre is not to be punished, in fact white may be glad that the disadvantage remains within the limits. 1. ... exd5 2. exd5 ♘b4 and now only 3. d6 avoids a clearly worse position. 3. ... ♕xd6 4. ♕x6 5. ♗xb6 and Black must first regain his pawn with 5. ... ♘fd5 6. ♗f2 ♘xc3 7. bxc3 ♖xe2. Better is 3. ... ♗f8 4. ♖ad1 ♘bd5 5. ♘xd5 ♘xd5 6. ♗f2 ♕xd6. There's not much going on, although a grandmaster will say, "I'd rather have black."
1. ♖fd1 Thoughtless development costs a piece: 1. ... d4.
1. ♘c2 Black can worsen white's pawn structure with 1. ... dxe4 because 2. ♕xd8 ♖axd8 3. ♗xb6 ♖d2 is not possible.

6) **1. ♗b3** Maintaining the tension is best. The bishop will become more active again one day.
1. ♗d3 Black captures on e4 and this is position 6 of page 2 in which White can only more or less survive after 2. ♗xe4.
1. exd5 Giving up the centre is unnecessary. Besides, 1. cxd5 will give Black square c6 for his knight.

7) **1. ... f5** Chasing the knight away the hard way is good (1. ... ♘f6? 2. ♘g5). Na 2. ♘c3, Black should be careful that White cannot not push d4 too easily, so 2. ... ♘c6 (2. ... ♘f6 3. ♘f3 ♗d6 4. d4). The knight move also makes e4 possible after 3. ♘f3 e4 4. ♘g5 ♘e5.

1. ... ♘c6 Playable. White develops further with 2. ♘f3 ♗e7 3. d3 and plays ♘e4 back to g3 when it's attacked by a piece.
1. ... ♗f5 Abandons the protection of b7 and White can become active with: 2. ♕f3 ♗g6 3. ♘g5 ♘f6? (3. ... ♘h6 is better but gives insufficient compensation after 4. ♕xb7) 4. ♕b3 and wins and is therefore better than 4. ♕xb7 ♘bd7 5. ♕b3 ♕e7.

8) **1. ♘f5** Direct action gives an advantage. 1. ... ♕f8 (1. ... exf5 2. ♖e1 ♗e5 3. ♘f3) 2. ♘c4 ♗c7 (2. ... ♗e7 3. b3) 3. ♖e1 ♘c6 4. ♕xd5.
1. ♘e4 0-0 (1. ... ♗e5 2. ♘f3 ♗c7 3. ♗g5 is less good) and White is a little better after 2. c4 ♘f6 3. ♘xd6 ♕xd6 4. ♘b5. In the endgame, White has the majority on the queenside although realizing such an advantage requires technique. White also has a bishop who can easily work on two wings.
1. c4 ♘f6 White weakens its pawn structure and that is no match for chasing the knight out of the centre. On f6 the knight defends. Furthermore, the pawn deprives square c4 of the knight.

9) **1. ... 0-0** Developing is the right plan. Castling is more useful than the knight move to c6. After 2. c4 ♕a5+ 3. ♗d2 ♕a4 White is a little better because of the pair of bishops. At Step 5 level it is certainly not a deadly weapon because the realisation requires a lot of technique.
1. ... ♗b5 is a blunder because with luring White wins material thanks to an X-ray attack: 2. c4 ♗xc4 3. ♗xc4 (but not 3. ♕a4+ b5) 3. ... ♕xc4 4. ♖c1.
1. ... ♘c6 2. c4 ♕a5+ 3. ♗d2 followed by 0-0 and ♗d3. White has the centre, the pair of bishops and more space, so more possibilities for his pieces.

10) **1. d5** White must take immediate action. 1. ... ♗xf3 (The pawn move is possible because 1. ... ♘xe5 2. ♘xe5 ♗xd1 3. ♗b5+ ends wrong.) 2. ♕xf3 ♘xe5 3. ♗b5+ ♘d7 4. 0-0 f6 5. ♗f4 (5. ♗a3 b6 6. ♖ae1 e5 7. ♖xe5+) 5. ... a6 6. ♗d3 g6 7. ♖ae1.
1. ♖b1 Not really a gain of tempo because the answer is equally useful. 1. ... ♕c7.
1. h3 Not bad but not as good as 1. d5. Black must go back with the bishop: .1. ... ♗e6 (1. ... ♗xf3 2. ♕xf3 cxd4 3. ♖b1 ♕d7 4. ♗b5 and White is better)

11) **1. ... ♗e4** 2. f3 (after 2. c3, 2. ... ♗d5 is correct; 2. ... ♗xh1 3. ♘xf7 gives white advantage) 2. ... ♕xd4.
1. ... ♗h7? has a simple refutation 2. ♘xf7 ♔xf7? 3. ♕xe6+ ♔g6 4. ♗d3#.
1. ... ♘xg4 costs a piece after 2. ♘xg4 ♕xd4 3. f3 or 3. ♘e3.

12) **1. ♘b3** White should prevent Black from playing c5 or e5. That gives him more space. 1. ... e5 (1. ... c5 2. ♘xc5) Now after 2. dxe5 ♘xe5 the d-pawn is hanging: 3. ♕xd5+. Insertion of 1. .... a5 2. a4 does not change much.
1. ♗d3 is awkward because Black can play 1. .... e5 (better than 1. ... c5 2. dxc5 ♘c6) 2. dxe5 ♘xe5 and White is in trouble with the king in the middle (3. ♘xe5 ♕xf2# is not possible, of course.
1. c3 ♘c6 But not 1. ... e5 2. ♗d3 exd4 (2. ... e4 3. ♘xe4 dxe4 4. ♕b3+ ♖f7 5. ♗xe4) and White has to play 2. ♘b3 after all.

32 Opening / Choose the best move: D

1) **1. ♘a3** 1. ... ♗xe5 (1. ... a6 2. ♘ac4 ♘c6 3. ♗g3! On immediately 3. ♘xd6+? ♕xd6 4. ♘g6, 4. ... ♕xd4 is very strong. White loses material - the knight on h8 is always lost.) 2. dxe5 ♘d5 3. ♘b5 and the knight enters. On 3. ... ♕d7 follows 4. ♘d6+ ♔f8 5. ♗e3. White has a big advantage of course.
1. ♘c3 From c3 only ♘b5 threatens and that is easy to parry. It is not always best to have a knight on c3.
1. c3 leads to an isolated pawn. That is nice if White would have attacking chances but there is no chance of that. There are too few pieces left, so the d-pawn is only a weakness: 1. ... cxd4 2. cxd4 ♘c6.

2) **1. ♕g4** After other developing moves Black can castle and although White is better (more space), in the right moment Black will come with c5. 1. ... ♔f8. Losing the right to castle is a permanent disadvantage (the black king is more vulnerable and it is difficult to bring the h-rook into play) 1. ... ♘f6 2. ♕xg7 ♖g8 3. ♘xf6+) 2. ♖e1 because 2. ... f5 is no threat because of 3. ♕f3. Black remains on c8 with a passive bishop.
1. ♗f4 0-0.
1. ♕f3 0-0.

3) **1. ... e6** Black hasn't finished his development yet, but he has to be careful. The pawn move closes in the bishop on c8 but otherwise 2. d5 will follow. On the next move, ♘c6 is a good move.
1. ... b5 2. ♗d5 (2. ♗xf7+ is the better possibility which requires some calculation but there is no danger for White, since the move does not really cost material, no risk: 2. ... ♖xf7 3. ♘e5 e6 4. ♘xf7 ♔xf7 5. ♘e4 ♗d7 6. ♘g5+) 2. ... ♘xd5 3. ♕xd5.
1. ... ♘c6 2. d5 ♘a7 3. ♖fd1 b5 4. ♗e2 ♗b7 The knight on a7 is rather passive. 5. ♘e5 looks at square c6 (when Black plays his knight to c8) and frees up f3 for the bishop.

4) **1. g4** The weakened black pawn structure and the king in the middle allow a direct punishment. 1. ... ♗d7 2. ♗d3 ♗g7 3. ♖xh7.
1. ♕d2 White retains the advantage, but Black is still in the game: 1. ... ♘c6 2. 0-0-0 ♗g7.

1. ♘ge2 Delays development and takes time. After 1. ... ♗g7 2. ♘g3 ♕d7 Black Black can continue with ♘c6 and 0-0-0.

5) **1. ... ♕a5** The unpinning of ♞f6 goes with tempo 2. ♕c2 (2. ♖c1 dxc4) 2. ... ♘e4.
1. ... 0-0 2. ♕b3 or 2. 0-0.
1. ... dxc4 (hoping for 2. ♗xc4 ♕a5) but 2. ♗xf6 solves the problem.

6) **1. ... d5** A tactical solution to develop with tempo. After 2. ♕xd5 (2. ♕a4 ♗d7) 2. ... ♕b4+ 3. ♗d2 ♕xb2 4. ♗c3 (better 4. ♗b5 ♗d7 but Black is better.) 4. .... ♗b4
1. ... f6 White develops with tempo: 2. ♘c3 fxe5 3. ♘d5 ♕d6 4. 0-0-0 with a huge development advantage.
1. ... d6 is better, but now2. ♘c3 follows (2. ♗b5 gives Black time 2. .... ♗d7 3. ♘c3 and now no 3. .... dxe5 4. ♘d5 but 4. ... 0-0-0).

7) White is a pawn down but the black queen is vulnerable in the line of the rook and she has to protect squares d6 and f6. White has more good moves but opening the position is by far the best.
1. d4 cxd4 (1. ... ♕xd4 2. ♘d6+ ♔f8 3. ♗h6+ ♔g8 4. ♕f3 ♕xd6 5. ♕f6 ♕d4 6. ♕xe7) 2. ♗g5.
1. ♕f3 f5 2. ♕c3 ♕xc3 3. ♘d6+ ♔f8 4. dxc3 h6 5. ♗e3 White wins back the pawn and stands better.
1. d3 d5 2. ♘xc5 ♕d6 (2. .... ♕d4 3. ♘b3 and 4. d4 and the knight comes to c5) 3. d4 all white pieces are good.

8) **1. ♘e4** 1. ... ♘a6 (1. ... b6 2. c5 bxc5 3. ♗e3).
1. ♗g5 is only fun when Black takes: 2. ♕xb7 but he plays 1. ... f6 2. ♗e3 f5 and all plans with ♘e4 are no longer possible.
1. 0-0 too quiet. After 2. ... ♘h6 (2. ... ♘f6 3. ♗g5 ♕c7 is less good) Black can castle.

9) **1. ... d5** In positions with the king in the middle and a development deficit, an open e-file is easily disastrous. Returning material with tempo is then necessary.. 2. ♗xf6 ♕xf6 3. ♕xf6 gxf6 4. ♗xd5 and black survives. Also 2. ♖e1+ ♗e6 3. ♗xf6 gxf6 gives no advantage.
1. ... ♗e7 Slowly preparing castling is less good. After 2. ♗xf6 gxf6 (2. ... ♗xf6 has a bad ending after 3. ♖e1+ ♔f8 4. ♕d5; also 3. ... ♗e7 4. ♕xg7 ♖f8 5. ♘c3 with the threats ♘d5 and doubling rooks on the e-file. Material is equal!) 3. ♖e1 Black has to give back a pawn with 3. ... d5 (3. ... 0-0 4. ♕g4+ ♔h8 5. ♗d3 d5 6. ♕h4) 4. ♗xd5 (4. ♕xf6 ♖f8 is disappointing because 5. ♗xd5 does not work because of 5. ... ♗e6) 4. ... ♗e6 5. c4 c6 6. ♘c3 and White keeps attacking.
1. ... d6 isn't really useful. White gets the advantage with 2. ♖e1+ ♗e6 3. ♗xe6 fxe6 4. ♖xe6+ ♔f7 5. ♖e3.

10) White can win pawn d4. What brings the best position?
1. ♗e2 h6 (Or 1. ... ♘e4 2. ♗f4 ♗f6 3. 0-0 and now, for example after 3. ... g6 4. exd4 ♘xd4 5. ♘xd4 ♗xd4 6. ♗f3 White always gets his pawn back while maintaining active play) 2. ♘xd4.
1. ♗d3 is not bad either, but White has to give up the bishop of the black squares and that is a pity: 1. ... h6 2. ♗xf6 ♗xf6 3. 0-0 ♕d6 4. b4 ♖ad8.
1. ♘xd4 is the wrong choice: 1. ... ♘xd4 2. ♖xd4 ♕xd4 3. exd4 ♗b4+ 4. ♔d1 ♖e1#.

11) **1. ♘xe4** is clearly the only move. After 1. ... dxe4 2. ♘d2 h6 3. ♗h4 g5 4. ♗g3 f5 5. e3 ♘f6 6. ♗c4 White will proceed with f3.
1. ♗f4 Not good because after 1. ... ♘xc3 2. bxc3 e6 3. e3 c5 it is Black who is better.
1. ♘xd5 costs a piece in a simple way: 1. ... ♘xg5 2. ♘xg5 e6.

12) **1. ♗g5** Not for lazy calculators but the best. 1. ... ♗xf3 (1. ... f6 2. ♘xe5; 1. ... ♘de7 2. ♘bd2) 2. ♕xf3 ♕xg5 3. ♗xd5 0-0 4. ♗xc6 bxc6 5. ♕xc6 is a fairly healthy pawn gain.
1. ♗b5 0-0 (1. ... f6 2. ♘xe5) 2. ♗xc6 bxc6 3. h3 is enough for equality. More dangerous is 3. ♖xe5 ♕d6 with play for the pawn.
1. ♘xe5 seems nice and wins in all cases except after 1. .... ♗xf2+ 2. ♔xf2 (after other king moves 2. ... ♗xd1 will be the answer) 2. ... ♕h4+ and because 3. g3 ♕xh2 will be mate) 3. ... ♗xd1 will follow next move.

33 Endgame / Rook against pawn: A

1) 1. ♔f2 ♔d2 2. ♖d8+ ♔c1 3. ♔e2 c2 4. ♖c8 ♔b2 5. ♔d2
2) 1. ♔e6 e3 2. ♔d5 ♔f3 3. ♔d4 e2 4. ♔d3
3) 1. ♔d7 ♔c4 2. ♔e6 d3 3. ♔e5 ♔c3 4. ♔e4 d2 5. ♔e3
4) 1. ... ♔f1 2. ♖f8+ ♔e2 3. ♖e8+ ♔f1 4. ♔f3 d2
5) 1. ... ♔e3
6) 1. ... ♔d4! 2. ♖f8 ♔e3 3. ♔c4 f3 4. ♖e8+ ♔d2!
7) 1. ... e3 (1. ... ♔e5? 2. ♖e1; 1. ... ♔f4? 2. ♔e6 e3 3. ♔d5 e2 4. ♔d4 ♔f3 5. ♔d3 ♔f2 6. ♔d2) 2. ♔d6 ♔e4! 3. ♔c5 ♔d3 (3. ... e2? 4. ♔c4 ♔e3 5. ♔c3 ♔f2 6. ♔d2)
8) 1. ♔b7 ♔c4 2. ♔a6 b3 3. ♔a5 ♔c3 4. ♔a4 b2 5. ♔a3
9) 1. ... ♔f2 2. ♖f8+ ♔e1! (1. ... ♔f1? 2. ♔e3; 1. ... ♔f3? 2. ♖f8+)
10) 1. ♖e5 ♔f6 2. ♖b5 g3 3. ♖b3

11) 1. ... ♔f4 2. ♖d8 ♔e3 3. ♔g4 d3 4. ♖e8+ (4. ♔g3 d2) 4. ... ♔f2!
12) 1. ... ♔c5 (1. ... b4 2. ♖d5) 2. ♔g7 b4 3. ♔f6 b3 4. ♖b8 ♔c4 5. ♔e5 ♔c3 6. ♔e4 b2

34 Endgame / Rook against pawn: B

1) 1. ♖b7 (1. ♔b7 ♔b5 2. ♔a7+ ♔a5 3. ♖b7) 1. ... ♔c4 2. ♔b6 b3 3. Ka5 Kc3 4. Ka4 b2 5. Ka3
2) 1. ♖c1 ♔d4 2. ♔b6 c3 3. ♔b5 ♔d3 4. ♔b4 c2 5. ♔b3
3) 1. ♖e1+ ♔f3 2. ♖d1 ♔e4 3. ♔c7 d4 4. ♔c6 d3 5. ♔c5 ♔e3 6. ♔c4
4) 1. ♔b1! e3 2. ♖a2+ ♔d1 3. ♖a8 e2 4. ♖d8+ ♔e1 5. ♔c2 ♔f2 6. ♖f8+ ♔e1 7. ♖e8
5) 1. ... ♔e4 (1. ... ♔e3? 2. ♖h2 c4 3. ♔d5) 2. ♔d6 c4 3. ♔c5 c3 4. ♖d1 c2 5. ♖c1 ♔d3
6) 1. ... ♔g4 2. ♔c6 ♔f4 3. ♔d5 g4 4. ♖b4+ ♔f3 5. ♖b3+ ♔f4
7) 1. ♖d8+ ♔c2 2. ♖e8 ♔d3 3. ♔f5 e3 4. ♔f4
8) 1. ♔g4 ♔e3 2. ♔g3 d3 3. ♖e1+
9) 1. ♖b7 (1. ♖c7+ ♔d4 2. ♖b7 ♔c4 3. ♔c7 ♔c5 4. ♖b8 b4 5. ♖b7 ♔c4 6. ♔b6 1-0) 1. ... b4 2. ♔c7 ♔c4 3. ♔b6 b3 4. ♔a5
10) Drawing
11) 1. ♖b4+ ♔d5 2. ♔b5 e4 3. ♖b1! ♔d4 4. ♔b4 ♔d3 5. ♔b3 e3 6. ♖d1+
12) 1. ♖f2+ (1. ♔c7 g5 2. ♔d6 g4 3. ♔d5 g3 4. ♔d4 ♔f4 5. ♔d3 ♔f3 6. ♖a8 g2=) 1. ... ♔e5 2. ♖g2 ♔f6 3. ♔c7 g5 4. ♔d6 ♔f5 5. ♔d5 ♔f4 6. ♔d4 g4 7. ♖f2+

35 Endgame / Rook against pawn: C

1) 1. ♔c7 (1. ♔d7 ♔d5) 1. ... ♔d5 2. ♔d7 ♔e4 3. ♔c6 (*Reti 1921*)
2) 1. ♔d1 g3 2. ♖c2+ ♔f1 3. ♖c8 g2 (3. ... ♔f2 4. ♖f8+ ♔e3 5. ♔e1 g2 6. ♖g8 ♔f3 7. ♖g7) 4. ♖f8+ ♔g1 5. ♔e2 ♔h2 6. ♖h8+ ♔g1 7. ♖g8 ♔h2 8. ♔f2
3) 1. ♔d6! g4 2. ♔d5 ♔f4 3. ♔d4 ♔f3 4. ♔d3 g3 5. ♖f7+ ♔g2 6. ♔e2
4) 1. ♔e4 g2 2. ♔f3 g1♘+ 3. ♔f2 ♔h2 4. ♖h6+ ♘h3+ 5. ♔f3
5) 1. ♖b1! (1. ♔a7? ♔b5 2. ♖b1 ♔a5 3. ♖a1+ ♔b5 4. ♖b1 ♔a5 5. ♔b7 ♔b5 6. ♔c7 ♔c5 7. ♖c1+ ♔d4!) 1. ... ♔c5 2. ♔a7 ♔b5 3. ♔b7 ♔a5 (3. ... ♔c5 4. ♔a6) 4. ♔c6
6) 1. ♖c7 b3 2. ♔d5 ♔a2 3. ♔c4 b2 4. ♖a7+ ♔b1 5. ♔b3 ♔c1 6. ♖c7+ ♔b1 7. ♖c8 ♔a1 8. ♖a8+ ♔b1 9. ♖a2 ♔c1 10. ♖xb2
7) 1. ♖a8 (1. ♖a1 b4 2. ♖b1 ♔b5 3. ♔c7 ♔c5) 1. ... b4 2. ♖b8+ ♔c5 3. ♔c7
8) 1. ♔a6! (1. ♔c6 ♔c2 2. ♔b5 b3; 1. ♔b6 ♔c3 2. ♖c7+ ♔d2) 1. ... ♔c2 2. ♖c7+ ♔d2 3. ♖b7 ♔c3 4. ♔a5 b3 5. ♔a4 b2 6. ♔a3
9) 1. ♔h5 (1. ♖f6+ ♔g4 2. ♖e6 ♔f4 3. ♔h5 e4 4. ♔h4 ♔f3 5. ♔h3 e3 6. ♖f6+) 1. ... e4 2. ♔h4 ♔f3 3. ♔h3 e3 4. ♖f6+ ♔e2 5. ♔g2
10) 1. ♔h6 (1. ♔g6 ♔f2; 1. ♔f6 ♔f2) 1. ... ♔f2 2. ♖f8+ ♔e3 (2. ... ♔g2 3. ♔g5 g3 4. ♔g4 ♔h2 5. ♖h8+) 3.♖g8 ♔f3 4. ♔h5 g3 5. ♔h4 g2 6. ♔h3
11) 1. ♖g3+ ♔a2 2. ♖g4! (2. ♔d6? b4 3. ♔c5 b3 4. ♔b4 b2 5. ♖a3+ ♔b1 6. ♔b3 ♔c1) 2. ... ♔a3 3. ♔d6 b4 4. ♔c5 b3 5. ♖b4 b2 6. ♔c4 ♔a2 7. ♖a4+ ♔b1 8. ♔b3 ♔c1 9. ♖c4+
12) 1. ♔b7 b4 2. ♔a6 ♔a2 3. ♔b5 b3 4. ♔b4 b2 5. ♖a7+ ♔b1 6. ♔b3 ♔c1 7. ♖c7+ ♔b1 8. ♖h7

36 Endgame / Rook against pawn: D

1) 1. g7 ♖f1+ 2. ♔g6 (2. ♔g8? ♔e7 3. ♔h7 ♖h1+ 4. ♔g6 ♖g1+ 5. ♔h7 ♔f7 6. ♔h8 ♖h1#) ½-½
2) 1. b7 ♖a2+ 2. ♔b1! ♖b2+ 3. ♔a1 ♖b4 (3. ... ♖h2 4. b8♕ ♖h1+ 5. ♕b1 ♖xb1+ 6. ♔xb1; 3. ... ♖xb7 stalemate) 4. b8♕ ♖xb8 ½-½
3) 1. ♔e5 (1. f5? ♔f3 2. ♔e7 ♖e4+ 3. ♔d7 ♖f4 4. ♔e6 ♔g4) 1. ... ♔e3 2. f5 ♖e4+ 3. ♔d6 ♖f4 4. ♔e6 ½-½
4) 1. ♔g5 ♔c3 2. ♔f6 ♔d4 3. ♔e6 ½-½
5) 1. ♔d3 (1. ♔e3? ♔c2 2. ♔d4 ♔d2 3. ♔e4 ♔e2 4. f5 ♖f8 5. ♔f4 ♔f2) 1. ... ♔c1 (1. ... ♔b2 2. ♔d4 ♔b3 3. f5 ♖f8 4. ♔e5) 2. ♔e4 ♔d2 3. f5 (3. ♔e5? ♖e8+) 3. ... ♔e2 4. f6 ½-½
6) 1. ♔e6 ♔d8 2. ♔f6 ♖f8 3. ♔e6 ♖h8 4. ♔f6 ½-½
7) 1. ♔e5! (1. ♔g7? ♖g1+ 2. ♔h7 ♖f1 3. ♔g6 ♔e4 4. f6 ♔e5; 1. ♔e6? ♔f4+) 1. ... ♔d3+ (1. ... ♔f3+ 2. ♔d6) 2. ♔d6 ½-½
8) 1. ♔b6 (1. ♔c5? ♖c1+) 1. ... ♔c2 2. b5 ♔b3 3. ♔c6 ♖c1+ 4. ♔d6 ½-½
9) 1. ♔b4 ♔c2 2. ♔c4 ½-½
10) 1. b5 ♔d5 2. b6 ♖c8+ (2. ... ♖c1 3. b7 ♖a1+ 4. ♔b8 ♔c6 5. ♔c8 ♖h1 6. b8♘+!) 3. ♔a7! ♔c6 4. b7 ♖c7 5. ♔a8 ♖xb7 ½-½
11) 1. ♔b3 (1. ♔a4? ♔g2) 1. ... ♖h4 (1. ... ♔g2 2. ♔c4 ♔f3 3. b5 ♔e4 4. b6 ♖h1 5. ♔c5 ♖c1+ 6. ♔d6) 2. ♔a4 ♔g2 3. ♔b5! ♔f3 4. ♔c5 ♔e4 5. b5 ♖h5+ 6. ♔c6 ♔d4 (6. ... ♖h6+ 7. ♔c5!) 7. b6 ♖h6+ 8. ♔c7 ♔c5 9. b7 ♖h7+ 10. ♔c8 ♔c6 11. b8♘+ ½-½

12) 1. ♔g3! (1. ♔f3 ♖a4 2. ♔g3 ♔b2 3. ♔h4 ♔c3 4. ♔g5 ♔d4) 1. ... ♖a4! (1. ... ♔b2 2. ♔f4) 2. ♔h4 ♔b2 3. ♔g5 ♔c3 4. ♔f5 ♖a5+ 5. ♔f6 ♖a6+ 6. ♔f5 ♔d4 7. g5 ♖a5+ 8. ♔f6 ♖a6+ 9. ♔f5 ½-½

37 Strategy / Strong square: A

1) 1. ... ♗xb3
2) 1. e6 fxe6 2. ♘e5
3) 1. a5
4) 1. ♗d5
5) Drawing
6) 1. ♗h3
7) 1. ... ♗f8 2. ♘c2 ♗h6
8) 1. ♗xf6 ♗xf6 2. ♗d5
9) 1. ... b4
10) 1. ... f3
11) 1. g3 Δ 2. ♗xc6; 1. ♗xc6? ♖e4+
12) 1. ♘h1

38 Defend against mate: A

1) 1. ♕a8+ (1. ♕a7+ ♔c8) 1. ... ♔xa8 2. ♗xd5+ ♔b8 3. ♗xf3
2) 1. ... ♖f3 2. ♔xf3 (2. ♖xf3 ♗c6+) 2. ... ♔f7
3) 1. ... ♕xg5 2. fxg5 ♗xg5+ 3. ♔c2 ♖xe6
4) 1. ... ♖xg1+ 2. ♔xg1 ♗e3+ 3. ♔f1 h5
5) 1. ♖e1! (1. ♘f1 ♕xf1+ 2. ♔xf1 ♖h1#) 1. ... ♕xe1+ 2. ♘f1
6) 1. ... ♗xe4+ (1. ... ♕d3+? 2. ♔a1 ♗xe4 3. ♖xg7+ ♔xg7 4. ♖h7+ ♔g8 5. ♗xf7+) 2. ♕xe4 ♕d3+
7) 1. ... ♘e3+ (1. ... c4 2. ♖xg8+ ♔xg8 3. ♗xc4+) 2. ♔d3 c4+
8) 1. ♖b8+ (1. ♖b5? ♕h4+ and 2. ... ♖xb5) 1. ... ♔h7 2. ♖b5 ♖xb5? 3. ♕d3+
9) 1. ... ♖d1 2. ♖xd1 ♕xf6
10) 1. ... ♘f2+ 2. ♔h2 ♘g4+ 3. ♔h3 ♘f6
11) 1. ... ♕e3+ 2. ♔xe3 ♘f5+ 3. ♔f2 ♖g7
12) 1. ... ♕d4! (1. ... ♕c1 2. ♕d8+ ♘c8 3. ♕a5+; 1. ... ♕a1 2. ♕d8+ ♘c8 3. ♕xe8)

39 Defend against a passed pawn: A

1) 1. e5+ ♔xe5 other moves lose: (1. ... ♔g5 2. ♘d4; 1... ♔e6 2. ♘d4+) 2. ♘d4 ♔xd4 (2... e1♕ 3. ♘f3+) 3. h6 e1♕ 4. h7
2) 1. ♔h1 e2 2. ♖g1 ♖f1 3. ♗c3
3) 1. ♖g4+ ♔xh1 (1. ... ♔f1 2. ♘g3+ ♔f2 3. ♘e2) 2. ♖b4 c1♕ (2. ... ♗xb4 5. ♔b2) 3. ♖b1
4) 1. ♖g5 h3 2. ♘c4 h2 3. ♖e5 h1♕ 4. ♘a5+ ♔b6 5. ♘c4+ ♔c6 6. ♘a5+
5) 1. ♖c5 ♔xc5 2. ♘b3+ ♗xb3+ (2. ... ♔c4 3. ♘d2+) 3. ♔a3 b1♕ stalemate
6) 1. ♖c1 ♘e1 2. ♖d1+ ♔e7 (2. ... ♔c8 3. ♘e6 f1♕ 4. ♖d8#) 3. ♘f3 ♘xf3 (3. ... f1♕ 4. ♖xe1+ ♕xe1 5. ♘xe1) 4. ♖f1
7) 1. ♖g3 (1. ♘g4+? ♖xg4+ 2. ♖xg4 h2; 1. ♖g4? h2) 1. ... h2 2. ♘g4+ (necessary because 2. Th3?? g5#) 2. ... ♔g7 3. ♖h3
8) 1. ♘h4 (1. ♘f4? ♔xf4 2. ♔h2 ♔e3 3. g4 ♔d2 4. ♔g3 ♔c2 5. ♖h1 b1♕ 6. ♖xb1 ♖xb1 7. ♔f4 ♔d3 8. ♔e5 ♖g1 9. ♔f5 ♔d4) (1. ♔g1 ♖c5) (1. ♘e7 ♖c5 2. ♖f1 ♖c1 3. ♘f5+ ♔g4 4. ♘e3+ ♔g5) 1. ... ♖c5 (1. ... ♔xh4 2. ♔g1 ♔g3 3. ♔f1) 2. f3 ♖c1+ 3. ♘g1 ♖xb1
9) 1. ♔f3 (1. ♔g4 ♔f7 (1. ... ♗d4 wins but is obviously not a good move and strongly discouraged. The win is then difficult: 2. ♘g3 b2 3. ♘e4+ ♔e6 4. ♘d2 ♗e3 5. ♘b1 ♔d5 and the computer gives mate in 22 moves) 2. ♔f5 ♗f6 3. d4 ♗xd4) 1. ... ♗d4 2. ♘g3 b2 3. ♘e4+
10) Drawing
11) Drawing
12) 1. ♖fe1 a1♕ 2. ♖1e7#

40 Overcoming a passed pawn: A

1) 1. ♘e5 b2 2. ♘c4 b1♕ 3. ♖a3#
2) 1. ♖a3+ ♔b1 2. ♘b6 ♔c2 3. ♘a4! b1♕ 4. ♖c3#
3) 1. ♖h4+ ♔g2 (1. ... ♔g1 2. ♘g3) 2. ♖h1 ♔xh1 3. ♘g3+
4) 1. ♘a5 a1♕ 2. ♖a6+ ♔b8 3. ♘c6+
5) 1. ♘g5! f1♕+ (1. ... ♔h5 2. ♘e4+ ♔h4 3. ♘d2!) 2. ♘f3+ ♔h3 3. ♖h5+ ♔g2 4. ♖h2#

6) 1. ♖d2 ♔b1 2. ♘e4 c1♕+ 3. ♘c3+ ♔a1 4. ♖a2#
7) 1. ♘d6 h2 2. ♘b5+ ♔b8 3. ♖f8#
8) 1. ♘d4 exd4 (1. ... a1♕ 2. ♖d8#; 1. ... ♔xd4 2. ♖d8#) 2. ♖g5+ ♔d6 3. ♖a5
9) 1. ♘e1 (1. ♘xf2 stalemate) 1. ... f1♕+ 2. ♘f3+ ♔h3 3. ♖h5+ ♔g2 4. ♖h2#
10) 1. ♘d7 a6 (1. ... a5+ 2. ♖xa5+) 2. ♖b8+ ♔a7 3. ♘e5 g1♕ (3. ... ♔xb8 4. ♘f3) 4. ♘c6#
11) 1. ♘f8+ ♔f6 2. ♘d7+ ♔g6 3. ♖e6+ ♔g5 4. ♖f6
12) 1. ♘xe4 f1♕ 2. ♖b3 ♔xb3 (2. ... ♕g1+ 3. ♘c5+) 3. ♘d2+

41 Defend against threats: A
1) 1. ... ♖e8 (1. ... ♕xd7 2. ♖xd7 ♖xf7 3. ♖d5)
2) 1. ♘b5 (1. ♔d2 ♗b4+ 2. ♔c1 exf4 3. ♘b5 ♘f6 4. ♘xd4 ♗g6; 1. ♗xe5 ♗b4#)
3) 1. ♕xh7+ (1. ♖xd4? ♖f1# ; 1. ♖e1? ♘f5+) 1. ... ♔xh7 2. ♘xf8+ ♔g8 3. ♖xd4
4) 1. ♘d6 ♖xe5 (1. ... ♖f8 2. ♕e7) 2. ♖xe5 (2. ... ♔g8 3. ♖e8+ ♕xe8 4. ♘xe8)
5) 1. ♗c2 (1. bxc4? ♖a1+ 2. ♔c2 ♗a4+; 1. ♗c3 ♘xc3; 1. ♗f3 ♘xd2 2. ♖xd2 ♖a1+)
6) 1. ... ♗d3 (1. ... ♗xg2 2. bxc5) 2. ♗a2 (2. ♗xd3 ♘xd3 3. ♘xh6 (3. ♔xd3 ♔xf7) 3. ... ♘xb4) 2. ... ♘a6 3. b5 ♘b4 4. ♗b3
7) 1. ... ♕e6+ (1. ... ♖xf1? 2. ♘b5+ ♔d7 3. ♖xc6; 1. ... ♗f7+? 2. ♖xf7+ ♖xf7 3. ♘b5+) 2. ♘d5+ ♔d7 3. ♖xf8 ♕xd5+ 4. ♔a1 ♖xf8 5. ♕xf8 ♗f7 =
8) 1. ♕xd2 (1. ♕f8+ ♔h7 2. ♖xc1 dxc1♕+ 3. ♔h2 fxe6) 1. ... ♕xd2 (1. ... ♕xe1+ 2. ♘xe1) 2. ♖xa1 ♕d5
9) 1. ... ♖e1+ (1. ... cxd6 2. ♕a4; 1. ... ♕xf4 2. d7+) 2. ♖xe1 (2. ♗xe1 ♕xf4 3. d7+ ♔d8) 2. ... ♕xf4 3. ♖bd1 (3. ♗g3 ♕a4) 3. ... cxd6
10) 1. ♕e7 (1. ♕e6? ♕c4 2. ♖ae2 ♖xe1+ 3. ♖xe1 ♕xe6) 1. ... ♕c5 (1. ... ♕d1 2. ♖ae2) 2. ♕e2 (2. ♕e6? ♕c4)
11) 1. ... ♖xf4 (1. ... ♖f6 2. ♘f7+ ♔g8 (2. ... ♖xf7 3. ♕xf7) 3. ♘d8+ ♗e6 4. ♘xe6) 2. ♘f7+ (2. gxf4 ♗xf4+ 3. g3 ♗xg5; 2. ♕f7 ♖h4+) 2. ... ♖xf7 3. ♕xf7 ♗xg3+
12) 1. ... ♖fe8 (1. ... ♕xc4 2. ♘e7+ ♔h7 3. ♕xh5+; 1. ... ♘xc4 2. ♘e7+; 1. ... ♖d7 2. ♕xh5; 1. ... ♖de8 2. ♕xh5 gxh5 3. ♘f6+) 2. ♘f6+ ♔f8

42 Rook endings / Mate: A
1)1. ♖a8! ♔xa4 2. ♔b6#
2) 1. ♖e6 Δ 2. ♖h6+ 3. g6+
3) 1. ♔g8
4) 1. ♔d3 ♖d7+ 2. ♔c3 Δ 3. b4#
5) 1. f5+ ♔h6 2. ♖g8!
6) 1. a3+ ♔xa3 2. ♖g4 Δ mat.
7) 1. ... ♖d6 2. ♖xa7+ ♔e6
8) 1. ♔f6 ♖f2+ 2. ♔g7 g4 3. ♖a5+
9) 1. g4! ♖xg4 2. ♖c7 Δ mate
10) 1. ♖e1+ ♖b1 2. ♖c1 ♖xc1 3. ♔xc1 h5 4. gxh6
11) 1. ... ♖e5 2. ♖g4+ ♔c3 Δ 3. ... ♖a5+
12) 1. f5 ♖xg3 2. f6

43 Rook endings / X-ray check: A
1) Drawing
2) 1. ♖h6+ ♔d7 2. ♖h8 ♖xa7 3. ♖h7+
3) 1. ♖a4 ♖xa4 2. ♖h3+ ♔d4 3. ♖h4+
4) 1. a3+ ♔xa3 2. ♖a5+ ♔b4 3. ♖a4+
5) 1. ... ♖a3+ 2. ♔e4 ♖a4+ Δ 3. ... ♖h4; 2. ♔e2 ♖a1
6) 1. ♔g3 ♔f7 2. ♖h8 (1. ♖h8? ♖h1+; 1. ♖g8? ♖h1+ Δ 2. ... ♖g1+)
7) 1. b6 axb6 2. a7
8) 1. ♖a5+ ♔c4 2. ♔c6 ♔xc3 (2. ... f1♕ 3. ♖c5#; 2. ... ♖f5 3. gxf5 ♔xc3 4. ♖xa3+ ♔d4 5. ♖f3) 3. ♖xa3+
9) 1. e7 ♔xe7 2. ♖c8
10) 1. ♔e4 h3 2. ♖h8 ♖xa7 3. ♖h6+ ♔e7 4. ♖h7+
11) 1. a6! bxa6 2. ♖a8; 1. ... ♖h6 2. axb7 ♔xb7 3. c6+ (1. c6? a6!)
12) 1. ♖g1! ♖a2 2. ♖g8 (1. ♖g8? ♖h1+)

44 Rook endings / Passed pawn: A
1) 1. ♖b7 ♔c8 2. ♖e7 ♔d8 3. ♖a7
2) 1. ♖f7 ♔c6 (1. ... ♔c8 2. e7 ♔d7 3. e8♕+; 1. ... ♔b8 2. e7 ♖c8 3. ♖f8) 2. e7 ♖c8 3. ♖f8 ♔d7 4. ♖xc8

3) 1. ♖d2+ ♔e7 2. f6+ ♔e8 3. f7+ ♔e7 4. ♖xd8 ♔xd8 5. f8♕+
4) 1. h7 ♖f8 2. ♖g4+ ♔h6 3. ♖g8
5) 1. ♖e7 ♖xe7 2. f6+ ♔xf6 3. h8♕+
6) 1. ♔a1 ♔a4 2. ♔b2 ♖h5 3. a7 ♖a5 4. ♖b3 (4. ♖b7)
7) 1. a7 ♖xh6+ (1. ... ♖d8 2. h7 ♔f7 3. ♖g8) 2. ♖h4 ♖xh4+ (2. ... ♖a6 3. ♖h8+ ♔e7 4. a8♕+−) 3. ♔g3
8) 1. ♖c3+ ♔a4 2. ♖c1 ♖xb7 3. ♖a1+ ♔b5 4. ♖b1+
9) 1. ♖e8 (1. ... ♔g6 2. ♖xe6+ ♔h7 3. ♖c6 ♖a3 4. ♔e2)
10) 1. ♖f6 (1. ♖g7+ ♔h8 2. ♔f7 h2) 1. ... ♖e8 (1. ... h2 2. ♖d6 ♖e8 3. ♖d8) 2. ♖d6
11) 1. ♖a4 ♖xa4+ 2. ♔b5 ♖a7 3. c6
12) 1. ♖b2! ♖xc7 2. ♖b8+ ♔f7 3. ♖b7 ♖e7+ 4. ♔d6 ♖xb7 5. axb7

45 Rook endings / Mix: A
1) 1. ... ♖g8 2. ♖a4 ♖g3
2) 1. ♖c8+ (1. b6 ♔b5 (1. ... ♖e1+ 2. ♔d6 ♔b5 3. b7 ♔b6=) 2. ♔d6 ♔a6=) 1. ... ♔b4 2. b6
3) 1. h5 ♖xh5 2. ♖e5
4) 1. ♖h1+ ♔g2 2. ♖c1 ♖a8 3. ♖xc2+
5) 1. ... ♔e7 (1. ... ♔d8 2. b7) 2. ♖b4 (2. ♖h4 ♔d6) 2. ... ♖d8 3. ♔c4 ♔d7
6) 1. ♖f3 (1. ♖e2 ♔g7) 1. ... ♖e1+ 2. ♔f7 ♖h1 3. ♔e7
7) 1. ♔f3+ (1. ♖d5 ♔g3) 1. ... ♔h3 (1. ... ♔g1 2. ♔g3 ♔f1 3. ♖h2 c4 4. g5) 2. ♖d5 ♖xh7 3. ♖h5+ ♖xh5 4. gxh5
8) 1. ♖g7+ ♔c8 2. ♔b5 (2. ♔b6? ♖a4!) 2. ... a2 3. ♖g8+ ♔b7 4. ♖g7+ ♔b8 5. ♖g8+
9) 1. ... ♖c8 2. g3 c5+ 3. bxc5+ bxc5+ 4. ♖xc5 ♖xc5
10) 1. ♖c5! ♖h6 2. ♖c6+! (2. b5+? ♔b7) 2. ... ♖xc6 3. b5+ ♔b6 4. bxc6 ♔xc6 5. ♔a5 (5. ♔b4? ♔b6) 5. ... ♔b7 6. ♔b5
11) 1. ... f6 2. f4 (2. f3 ♖f1) 2. ... ♖f1 3. fxg5 (3. f5+ ♔h6) 3. ... fxg5
12) 1. ♔e4! (1. ♔e5? ♖d3!; 1. ♔c5? ♖d3) 1. ... ♖e1+ 2. ♔f3 (2. ♔f4? ♖d1) 2. ... ♖d1 3. ♖xa3 ♖xd5 4. ♖a1+

46 Attack on the castled king: A
1) 1. ... ♖xf3 2. gxf3 ♕g5+ 3. ♔h1 ♕h5
2) 1. ♘f6 ♗g8 2. ♘h5 gxh5 3. ♕f6#
3) 1. ♘f6+ gxf6 2. ♕g6+ ♔h8 3. ♕xf6+ ♔g8 4. ♖d6 ♘c4 5. ♕g5+
4) 1. ♘h6+ ♔f8 2. ♘f5
5) 1. ♕xh7+ ♔xh7 2. ♖h3+ ♔g7 3. ♗h6+ ♔h7 4. ♗f8+
6) 1. ♕xg4 fxg4 2. ♘g6+ hxg6 3. hxg6+
7) 1. ♘f6+ ♗xf6 2. ♕xg6+ ♔h8 3. ♕xf6+ ♔h7 4. ♕h6+ ♔g8 5. ♕g6+ ♔h8 6. ♕xh5+ ♔g8 7. ♗h6
8) 1. ♕xh7+ ♘xh7 2. ♖xh7+ ♖xh7 (2. ... ♔xh7 3. ♖h3+) 3. ♖g8#
9) 1. ♘f6+ gxf6 (1. ... ♔h8 2. ♕c2) 2. ♕g4+ ♕g5 3. ♗xf6
10) 1. ♖xg7+ ♔xg7 2. ♗h6+ ♔xh6 3. ♕f6+ ♔h5 4. ♗d1#
11) 1. ♗xh6 ♖xh6 (1. ... ♗g7 2. ♗g5+ ♔g8 3. ♗f6) 2. ♕xh6+ ♔xh6 3. ♖g5
12) 1. ♘f6+ gxf6 2. ♕h7+ ♔f8 3. ♘xe6+ ♘xe6 4. ♗h6+ ♘g7 5. ♗xg7#

47 Attack on the castled king: B
1) Drawing
2) Drawing
3) 1. ♕g5+ ♔h8 2. ♖g3
4) 1. ♖a7 ♕xa7 2. d7
5) 1. b4 (1. ♗xf6 hxg5) 1. ... ♕b5 2. ♗xf6
6) 1. ... ♖b4 (1. ... ♘f3+? 2. ♗xf3 ♕xf3 3. ♕e4) 2. axb4 (2. f3 ♗c5+; 2. ♕xc6 ♘f3+) 2. ... ♘f3+ 3. ♗xf3 ♕xf3
7) 1. ♘e4 ♕e7 2. ♗e3 ♗b7 3. ♗c5
8) 1. ... ♘b3 2. ♗xb3 ♗xe3+ 3. ♕xe3 ♕g2#
9) 1. ♕g5 ♖b8 (1. ... ♗xg5 2. ♖h8+ ♔g7 3. ♖1h7#) 2. ♘xf6+
10) 1. ♗e4 (1. ♕xh5? ♕xg2#) 1. ... ♕c8 2. ♕xh5 (2. ♘xh7 ♗xe4 3. ♘xf8 d5)
11) 1. ... ♖d2 2. ♗xd2 (2. ♗xf3 ♖xf2 3. ♔xf2 ♕h2+ 4. ♗g2 ♗h4) 2. ... ♗d4
12) 1. ♗xe4 (1. ♘xg7 ♔xg7 2. ♗xe4 c5) 1. ... ♘xe4 2. ♕h6 ♗f6 3. ♗xf6

48 Attack on the castled king: C
1) 1. ♕xf7 ♘xf7 2. ♖g8+ ♖xg8 3. ♘xf7#
2) 1. ♖f6 ♕xe5 2. ♕xh6+ ♗xh6 3. ♖xh6#

3) 1. ♖d5 exd5 2. ♗g8 (2. ♕h5 is a loss of time 2. ... ♔g7 3. ♕g6+ ♔h8 4. ♗g8) 2. ... ♖f7 3. ♗xf7 (3. ♕xf7? ♘f8)
4) 1. ♕g5 d5 2. ♕g7+ ♗xg7 3. ♗xg7+ ♔g8 4. ♗f6#
5) 1. ♕g5+ ♔f8 2. ♕f6 (2. ♖h4 ♗e5) 2. ... ♗e5 3. ♕xe5 f6 4. ♕xf6+ ♖f7 5. ♕h8+ ♔e7 6. ♖d7+ ♗xd7 7. ♖xd7
6) 1. ♕h6 ♕g8 2. f4 ♗xb2 (2... ♕g6 3. ♕f8+ ♕g8 4. ♕e7) 3. e5 ♕g6 4. ♕f8+ ♕g8 5. ♕e7 ♕g6 6. ♕d8+ ♕g8 7. ♕xf6+
7) 1. ♗g6+ ♔g7 (1. ... fxg6 2. ♖xg6 exf5 3. ♕xh6#) 2. ♗h7+ ♔xh7 3. ♖h3 ♖h8 4. ♕xh6+ ♔g8 5. ♖g3#
8) 1. ... ♘e1 2. ♖xe1 ♕f3+ 3. ♔g1 ♗h3
9) 1. ♘g5 ♗xf5 2. ♘xh7 ♕e6 3. ♘xf6+
10) 1. ... ♕h3 2. ♖g1 ♖h5 3. ♘xh5 ♕xf3+
11) 1. ♖g3+ ♔h7 2. ♖f5 ♕h6 3. ♖h5
12) 1. ... ♗f8 2. ♗e6 ♗g7 3. ♖d3 ♕a3

49 Attack on the castled king: D
1) 1. ♖g6 fxg6 2. ♕xg6+ ♔h8 3. ♕xh6+ ♕h7 4. ♕xf8+
2) 1. ♕e3 (1. ♕g5? ♕f8) 1. ... ♕f8 2. ♕xd4
3) 1. ♕h5 ♔h8 (1... ♖ae8 2. ♖h4 (2. ♘h6+ gxh6 3. ♖g4+) 2... h6 3. ♘xh6+ gxh6 4. ♕xh6) 2. ♖h4 h6 3. ♕g5
4) 1. ♕g5 ♕e8 2. ♘f5+ ♔h7 3. ♕h6+ ♔g8 4. ♕xg6+ ♔h8 5. ♖f4 (5. ♕h6+ ♔g8 6. ♖f4)
5) 1. ♘xc6+ dxc6 2. ♘a7 ♕e1 3. ♘xc6#
6) 1. ... ♖xa3 2. bxa3 ♕h4
7) 1. ♕a1+ ♖6g7 2. ♖xh7+ ♔xh7 3. ♕h1+ ♔g6 4. ♕h5+ ♔f6 5. e5#
8) 1. ♗c4 (1. ♗b5 ♕d6 2. ♗xe8 ♖xe8) 1. ... ♕xc4 (1. ... ♕f6 2. fxg6; 1. ... ♖a6 2. ♗xf7+) 2. f6
9) 1. ♗xg6 hxg6 2. ♕xg6 ♖xd6 3. ♖xf7
10) 1. ♕e2 ♗e6 (1. ... ♕xe2 2. ♘xf7#; 1. ... ♕f6 2. ♕e5 (2. ♘xf7+)) 2. ♘xf7+ ♕xf7 3. ♕e5+ ♕f6 4. ♕xf6#
11) 1. ♗f5 (1. ♕g4+? ♔h8 2. ♕f5 e4) 1. ... ♘e6 (1. ... h6 2. ♕g4+ ♔h8 3. ♕h4 ♔g7 4. ♕g3+ (4. ♖f1) 4. ... ♔h8 5. ♕e3) 2. ♕h5 ♖e8 3. ♕xh7+ ♔f8 4. ♕h8#
12) 1. ♗xg7 ♘xg7 2. ♖d8 ♘ce6 3. ♕xg7+ ♘xg7 4. ♘h6+ ♔h8 5. ♖xf8#

50 Strategy / Open file: A
1) 1. f4 (opening the f-file)
2) 1. cxd5 exd5 2. ♖ac1 ♖ac8 3. ♗a6 (opening a file, occupying and chasing away defenders)
3) 1. ♖g6 (occupying the strong square)
4) 1. ♖c6 (occupying the strong square)
5) 1. ... ♘b4 (conquering the c-file)
6) 1. ♗a6!; 1. ♖ac1 ♖ac8 2. ♗a6 ♖c5 (eliminate the defence)
7) 1. ... ♘g3 2. ♖hc1 ♘e4, and White must give up the a-file.
8) 1. ♖c8 ♔f8 2. ♖xd8+ ♖xd8 3. ♖c7
9) 1. ♘d3, and Black must give up the a-file, otherwise pawn b4 is lost.
10) 1. ... ♖c6 2. ♖xc6 ♕xc6+
11) 1. g4 (1. ♗g5 ♔g7 2. ♗xf6+ ♔xf6 3. ♖d7 ♖b8 4. c5 ♔e6 5. ♖c7 f6 and 6. ... ♔f7)
12) 1. ♕e5 (opening the d-file)

51 Strategy / Open file: B
1) 1. f4 (1. f3 f6 2. exf6 gxf6 3. ♔f2 ♔f7 4. ♖b1 ♖e8) 1. ... g5 (1. ... f6 2. ♔f2 ♔f7 3. ♖b1 ♖e8) 2. ♔f2 (2. fxg5 ♔g7 3. ♔f2 ♖b8) 2. ... gxf4 (2. ... ♔g7 3. ♖b1 f6 4. ♖b7+ ♔g6) 3. ♖b1 ♔g7 4. ♔f3
2) 1. ♖c6 ♕d8 (1. ... ♕e8 2. ♖xf6 gxf6 3. ♗xd5 ♖c8 4. ♕g6+) 2. a4
3) 1. ♖xd8 ♖xd8 2. ♗a3 ♖c8 3. ♖d1
4) 1. ♕xe4 (Much better than the move played 1. ♕f3 ♕xf3+ 2. ♔xf3 f6 3. ♖ed1 ♖xc1 4. ♖xc1 ♖d7 5. b4 ♔f7 6. g4 g5 draw (*Waardenburg,F-Koning NL ch jr Rotterdam 2016*) 1. ... dxe4 2. ♖ed1 (also 2. ♖xc8 ♖xc8 3. ♖d1 gives advantage) 2. ... h5 (2. ... ♔f8 3. ♖xc8 ♖xc8 4. ♖d7 ♖b8 5. g4) 3. ♖xd8+ ♖xd8 4. ♖c7 ♖b8 5. ♖e7 f5 6. h3 ♔f8 7. ♖e5)
5) 1. ♖c6 ♔h8 2. ♖fc1 g6 3. ♕c3
6) 1. ♘a4! ♔e7 (1. ... ♖c7 2. ♖c3 ♖xc3 3. ♔xc3 ♔e7 (3. ... ♘e8 4. ♔d4 ♘c7 5. ♘c3) 4. ♘c5) 2. ♘b6 ♖d8 3. ♖c3 ♔d6 4. ♖c5
7) 1. ♘xb5 ♕xb5 2. ♗h3 ♖xc1 3. ♖xc1
8) 1. ♕d1 ♕c6 2. ♖d7 ♖c7 3. ♖d6 ♕e4 4. ♖d8+ ♔g7 5. h4 (5. ♖b8 g5 6. h3 g5 ♖b8!)
9) 1. ... b5! (1. ... ♔e6 2. ♔f2 b5 3. ♘d2) 2. cxb5 axb5 3. ♔f2 (3. a4 ♖c3)) 3. ... ♔e6 (3. ... ♖a8 4. ♖d2 ♘c6)

4. e4 ♖a8
10) 1. ♕a1! ♘f5 (1. ... ♘c6 2. ♖c1) 2. ♖c1 ♕d7 3. ♕c3
11) 1. ... ♘e4 2. ♕e3 (2. ♖xe4 ♖xd1+ 3. ♗xd1 ♖xd1+ 4. ♖e1 ♕d7 5. h3 ♖d3 6. ♕c2 g6 7. ♖e2 ♕d4) 2. ... ♖xc2 3. ♕xe4 ♖xb2
12) 1. ♗a6 ♕b8 2. ♗xb7 ♕xb7 3. ♕c2 ♖e8 4. ♕c7 ♖e7 5. ♕d6

52 Draws / Stalemate: A
1) 1. a8♕ (1. g5+? ♔f7 2. g6+ ♔g8 3. a8♕+ ♗f8+) 1. ... ♗c1+ 2. g5+ ♗xg5+ 3. ♔h7 ♖xa8 stalemate *(Vinichenko 1991)*
2) 1. ♕h5+ (1. ♖f3? ♕xf3 2. ♕c2+ ♔g8) 1. ... ♔g8 2. ♖f8+ ♔xf8 3. ♕f3+ ♕xf3 stalemate *(Knuttson 1997)*
3) 1. ♖a6+ ♗xa6 2. a8♕+ ♔b6 3. ♕a7+ ♖xa7 stalemate
4) 1. ♖c1 (1. ♖c6+? ♔h7) 1. ... ♘xc1 (1. ... ♗xc1 2. ♖h8+) 2. ♖g2 h1♕ (2. ... h1♖ 3. ♖h2+ ♖xh2) 3. ♖h2+ ♕xh2 stalemate *(Malyshev 2019)*
5) 1. ♔h4 g5+ 2. ♔h3 (2. ♔h5? ♘f6+ (2. ... ♘f4+? 3. ♔g4 ♖xb5)) 2. ... ♘f4+ 3. ♔g4 ♖xb5 stalemate *(Minski, Gurgenidze 2017)*
6) 1. ♕xc2 (1. ♕xc5+? dxc5 2. ♘xc2 c4+ 3. ♔b2 cxd3) 1. ... d5 2. d4+ ♕xc2 stalemate *(Avni, Afek 2017)*
7) 1. c6+ ♔a6 (1. ... ♔xc6 2. ♗f3+ ♔b5 (2. ... ♔c5 3. ♗xa8) 3. ♗xa8 ♔xa5 4. ♔c4 ♔a4 5. ♗f3 ♔a3 6. ♗e4 a5 7. ♗c2) (1. ... ♔b8 2. a6) 2. ♔a4 ♖e8 3. ♗f5 ♖d8 4. ♗d3+ ♖xd3 stalemate *(Pasman 2019)*
8) 1. ♘c5 ♖g8 2. ♔g5 (2. ♘e4+? ♔d4 3. ♘f6 g5+ 4. ♔xg5 ♖xg7+) 2. ... ♖xg7 3. ♘e4+ ♔d4 4. ♘f6 ♔e5 5. ♔h6 ♔xf6 stalemate *(Popov 2019)*
9) 1. ♔d1 ♗d6 2. h6 ♕xc3 3. f8♕+ ♗xf8 stalemate *(Polasek 2020)*
10) 1. ♖a3+ (1. ♖g7? ♘g4) (1. ♖a1? h4) 1. ... ♔b2 2. ♖g3 ♘d3+ 3. ♔d4 ♘e1 4. ♔e3 h4 5. ♔f2 hxg3+ 6. ♔g1 ♔c3 stalemate *(Schmidt 2000)*
11) 1. ♖b6 (1. ♖b3? f1♘ (1. ... f1♕? 2. ♖b4+ ♔xb4)) (1. ♖b8? f1♗ (1. ... f1♕? 2. ♖b4+ ♔xb4) 2. ♖g8 ♗c4+ 3. ♔b1 ♗xg8) 1. ... f1♕ (1. ... f1♖ 2. ♖b4+ axb4 (2. ... ♔xb4)) 2. ♖b4+ ♔xb4 (2. ... axb4) *(Tarasiuk 2012)*
12) 1. ♗f3 ♖c4 2. ♗d5 (2. ♗xc6? ♖xc6 3. d7 ♖d6) 2. ... ♗xd5 (2. ... ♖c3 3. ♔f8 ♗xd5 4. d7) (2. ... ♖c5 3. ♗e6 ♖e5 4. ♔f7) 3. d7 ♖c7 4. ♔h8 ♖xd7 stalemate *(Arestov 2020)*

53 Draws / Insufficient material: A
1) Drawing
2) 1. ♖d4+ ♔c6 (1. ... ♔e5 2. ♖e4+ ♔xe4 3. ♘c5+) 2. ♖c4+ ♕xc4 (2. ... ♘bxc4 3. ♘d4+) (2. ... ♔d7 3. ♘c5+) (2. ... ♔b7 3. ♘c5+) (2. ... ♔b5 3. ♘d4+) 3. ♘a5+ *(Daniel 1914)*
3) 1. ♘e5+ ♔f6 2. ♘f3 ♖h1 3. ♔f2 ♔f5 4. ♔g2 *(Pogosiants 1976)*
4) 1. ♗c8 ♗e6 2. ♗a6+ ♔e3 3. ♗c4 *(Kubbel 1930)*
5) 1. ♔h3 (1 . g4? ♗f7) 1. ... ♘g6 (1. ... ♘f5 2. g4) 2. g4 ♘f4+ 3. ♔g3 ♘e2+ 4. ♔f3 ♘d4+ 5. ♔e4 *(Pogosiants 1963)*
6) 1. ♖b6 ♗h5 2. ♖b3 ♗f7+ 3. ♔e4 ♗xb3 4. ♔f3 *(Strycek 1983)*
7) 1. ♖b5 ♗c2+ 2. ♔b2 ♗e1 3. ♖d5+ ♔e7 4. ♖e5+ *(Pogosiants 1979)*
8) 1. ♗b5 (1. ♗c4? ♖e4; 1. ♗d3? ♔e7; 1. ♗h5? ♖e6 2. ♔xh8 ♖h6+) 1. ... ♖e5 2. ♗d3 (2. ♗c4? ♖e4 3. ♗g8 (3. ♗d3 ♖h4 4. ♗h7 ♘f7) 3. ... ♖h4 4. ♗h7 ♘f7) 2. ... ♖h5 (2. ... ♖e3 3. ♗h7 (3. ♗f5? ♖f3) 3. ... ♖e8 4. ♗g8 ♘g6 5. ♗f7) 3. ♗h7 (3. ♗c4? ♔e7 4. ♗a2 ♖h2 (4. ... ♖a5? 5. ♗g8) 5. ♗c4 ♔d6) 3. ... ♘f7 4. ♗g6 *(Isenegger 1955)*
9) 1. ♔d5 ♖d8+ 2. ♘d7 (2. ♔e6? ♗c6 3. ♔e7 ♖b8 4. ♔d6 ♗xb7 5. ♔c7 ♖c8+) 2. ... ♗xd7 (2. ... ♖xd7+ 3. ♔c6) 3. ♔d6
10) 1. f8♕ ♗xf8 2. ♔d8 ♘e6+ (2. ... ♘e4 3. ♔e8 ♗h6 4. ♔f7 ♘d6+ 5. ♔e6 ♘e8 6. g7) 3. ♔e8 ♗h6 4. g7 ♘xg7+ (4. ... ♗xg7 5. ♔f7) 5. ♔f7 ♘f5 6. ♔g6 *(Pachman 1951)*
11) 1. g6 h2 2. ♖h4 (2. g7? h1♕+ 3. ♔c2 ♕h7+ 4. ♔d2 ♕g8) 2. ... ♗xh4 3. g7 h1♕+ 4. ♔c2 *(Zakhodyakin 1982)*
12) 1. dxe8♘ (1. dxe8♕? ♘xd6+) 1. ... ♗xe8+ 2. d7 ♗xd7+ 3. ♔b6 ♘d6 (3. ... ♘d8 4. ♔c7) 4. ♔c7

54 Draws / Insufficient material: B
1) 1. ♔c2 (1. ♔c3? ♔e5 2. ♔d3 ♘f5 3. ♔c2 ♘h4 4. ♔d1 ♘g2) 1. ... ♔f5 (1. ... ♔e5 2. ♔d1 ♔f5 3. ♔e1 ♘e4 4. ♔f1) 2. ♔d3 ♘f1 3. ♘f2 ♗xf2 4. e4+ ♔f4 5. ♔e2 *(Ornstein 2000)*
2) 1. ♖h8+ ♔xa7 2. ♖f8 ♖e5 3. e4 ♗xe4 (3. ... ♖xe4 4. ♖xf5) 4. ♖xf4 *(Prokes 1947)*
3) 1. b8♘+ ♖xb8 (1. ... ♗xb8+ 2. ♔xd4) 2. ♖xb8 ♘c6+ 3. ♔d6 ♘xb8 4. ♔c7 ♔a5 5. ♔b7 *(Pogosiants 1964)*
4) 1. ♔f3 ♘h4+ 2. ♔g3 ♘g6 3. ♘b5 (3. ♘f5? ♔c7) 3. ... ♔b8 5. ♘d6 *(Kubbel 1929)*
5) 1. ♗c2 ♖b2 2. ♗g6 ♗xg6 3. ♘e5 ♗e4 (3. ... ♖b6 4. ♘c4+) 4. ♘c4+ *(Zakhodyakin 1985)*
6) 1. ♘hf2 ♖xf2 2. ♔g3 ♖f1 3. ♘e3 ♖g1+ 4. ♔h2 (4. ♔f2? ♖g7 5. ♘xf5 ♖f7) *(Isenegger 1960)*
7) 1. ♗h3 (1. ♘e3? ♘xg2 2. ♘d1 ♔g5 3. ♘b2 (3. ♘c3 ♔f4 4. ♔f6 ♔xf3 5. ♔e5 ♔e3) 3. ... ♔f4 4. ♔f6

♔e3 5. ♔e6 ♔xf3) 1. ... d1♕ (1. ... ♘g2 2. ♔f6) (1. ... ♘c2 2. ♔f6) 2. ♗g4+ ♔g5 3. f4+ ♔xg4 4. ♘e3+ *(Kuzmichev 1985)*

8) 1. ♘g7+ (1. ♘c7+? ♔d6 2. ♘a6 ♗b5+) 1. ... ♔f7 2. ♘h5 ♗g4+ 3. ♔f2 ♗xh5 4. g4 ♗g6 (4. ... ♗xg4 5. ♔g3) 5. ♔g3 *(Pogosiants 1963)*
9) 1. ♘b3+ ♖xb3 2. ♔xb3 (2. h8♕? ♗c2) 2. ... a1♘+ 3. ♔a2 ♘c2 4. h8♘ (4. h8♕ ♗f7+) *(Pogosiants 1964)*
10) 1. ♘d5 ♖e5 2. ♘f4+ ♔g4 3. ♘d3 ♖d5 4. ♘xe1 ♖d2 5. ♔g1 *(Perelman 1955)*
11) 1. ♘g3+ ♘xg3 2. ♖h2+ ♕xh2 3. g7 *(Engel 1982)*
12) 1. ♘e6! ♖xh3 (1. ... fxe6+ 2. ♗xe6 ♖xg5+) 2. g6+ ♔xg6 (2. ... fxg6 3. ♘g5+) 3. ♘f4+

55 Endgame / Wrong bishop: A

1) 1. ♔f3; 1. ♔xd4? ♔g4 2. ♔e3 ♔g3; 1. ♔f4 ♔h4 2. ♔f3 ♔h3 and and the king will not reach the corner.
2) 1. ♔f2! and the king will reach h1 (1. ♔f3? ♗e5 2. ♔f2 ♗h2 3. ♔f3 ♔f5; 1. ♔f1? ♗d4)
3) 1. ♔c2 and Black must give up the control over b2 or b1; 1. ♔c3? ♗b1 2. ♔c4 ♔b2 *(De Feijter 1940)*
4) 1. ♔e2! h3 2. ♔f3; 1. a5? h3 2. ♔f1 ♗c5 and the black king stops the white pawns.
5) 1. ♔d6! ♔xb7 2. ♔c5 a4 (2. ... ♔a6 3. ♔c4 a4 4. ♔b4!; 2. ... ♗e2 3. ♔d4) 3. ♔b4; 1. ♔d4? a4 2. ♔c3 a3 *(Mockel 1962)*
6) 1. ♔e1 ♔c5 2. ♕xd5+ ♔xd5 3. ♔d2; 1. ... ♕xg2 is stalemate.
7) 1. ♔f7 ♔h6 2. ♔g8 keeps the black king out of the corner.
8) 1. ass5 ♔d5 2. a6 ♔c6 3. ♗d8
9) 1. ♗b6 ♔c6 2. ♗a5
10) 1. ♗e8 ♔f6 2. h6; 1. h6? ♔f7 2. ♗e4 ♔g8
11) 1. ... h3 2. ♔f3 ♗f4 3. ♔f2 ♗h2 4. ♔f3 ♔f5
12) 1. ♔c5 ♔e7 2. ♔c6 ♔d8 3. ♔b7 ♔d7 4. ♗c1 and now because the black king cannot reach the corner any longer, it is time to collect the a-pawn.

56 Endgame / Wrong bishop: B

1) 1. ♗b6 ♔c6 2. ♗a5
2) 1. ♗e4 ♔xe4 2. ♔g4 ♔e5 3. ♔g5 (*Vancura 1922*)
3) 1. ♗f1 (1. ♗g4? ♔f2 2. ♔f4 ♔g2) 1. ... ♔f2 2. ♔g4 ♔xf1 3. ♔xh3 ♔f2 4. ♔g4 (*De Feijter 2005*)
4) 1. ♔e4 ♗c7 2. ♔f5 ♗d8 (2. ... h4 3. ♔g4 ♗d8 4. c7 ♗xc7 5. ♔xh4) 3. c7 ♗xc7 4. ♔g5
5) 1. ♗e1 g3 2. ♗xg3 hxg3 3. hxg3
6) 1. ... ♔c7
7) 1. ♗e6 ♔e7 2. h6 ♔f6 3. ♗f5 ♔f7 4. ♗h7 ♔f6 5. ♔f4
8) 1. ♗g4 h5 (1. ... ♔g3 2. ♔f6 ♔h4 3. ♔g6 h5 4. ♔f5) 2. ♔f5 hxg4 3. hxg4 ♔g3 4. ♔xg5
9) 1. ♗h6 ♔g8 2. ♗xg7
10) 1. ♔a4 ♔d4 2. ♔a3 ♔c3 3. b5! (3. ♔a4 ♔b2 4. ♔a5 ♔b3) 3. ... axb5
11) 1. ♔a7 (1. ♗e5 f3 2. ♗g3 f2 3. ♗xf2 ♔b8) 1. ... f3 2. ♗d4 ♔c7 3. a4 ♔c6 4. a5 (4. ♔b8? ♔d5 5. ♗f2 ♔c4 6. a5 (6. ♗e1 f2 7. ♗xf2 ♔b4) 6. ... ♔b5 7. ♗b6 f2) 4. ... ♔b5 5. a6 ♔c6 6. ♔b8
12) 1. ♗g8 ♔f6 2. ♔f3 g5 3. ♗h7