Step 2 Thinking Ahead

The page number and title of the exercise are written as: **3: The pin: A** (or B, C ...).
Most pages in the workbook have a layout of 4 rows and 3 columns. We read (4-2) as: fourth row, second column.

3: The pin A

1) 1. ♖xf6 ♖gf8 2. ♖f7
2) 1. ♗e2 ♖xc3 2. ♖d1
3) 1. ♗e3 ♗c5 2. ♖b5 (2. ♖c7 ♘d4)
4) 1. ♕h3 h5 2. ♕h4
5) 1. ♕b3 f5 2. ♕a3
6) 1. ... ♗f4 2. ♕xc3 ♖c7
7) 1. 0-0 ♘xc4 2. ♕a4 (2. ... d5 3. exd6)
8) 1. ♕xh7 ♕xf4 2. ♗g3
9) 1. ... g6 2. ♕xg6 ♖g7 (2. ... ♖g8 3. ♕e4 moving away and protecting the mate on g2 is Step 2. A Step 3 solution is 3. ♖xh7+ ♖xh7 4. ♕xf6+ with perpetual check)
10) 1. ♘e5 ♕g5 2. ♕c1! (2. ♕d2? ♘h3+)
11) 1. f6 ♗xf6 2. ♖f4! (2. ♖f1? ♖a1)
12) 1. dxe5 ♗xc5 2. ♕c1 (2. ♕c2? ♗xf2+ 3. ♔xf2 ♕xc2) 2. ... ♗xf2+ 3. ♔xf2

4: Winning material A

1) 1. ♕xh6 ♕xg6 2. ♕xg7 (2. ♕h8+ ♔f7) (twofold attack thanks to X-ray protection)
2) 1. ♘c3 ♕e5 2. f4 (2. ♘xd5? ♕a1+; 2. ♕xd5? ♕e1#) (eliminating the defence)
3) 1. ... ♖xc5 2. ♖d2 ♕xc4 (2. ... ♖xc4? 3. ♖d8+) (twofold attack)
4) 1. ♘xa7 ♖xc3 2. ♘xc8+ ♖xc8 3. ♖xc8 (twofold attack thanks to X-ray protection)
5) 1. ♗f4 ♗e5 2. ♕xg3 (2. ♗xg3? ♗xg3)
6) 1. c4+ bxc3+ 2. ♔xc3+ (double attack thanks to a discovered check)
7) 1. ♕d3 ♖c8 2. ♗xa6 (2. ♗xe6+ ♘xe6 3. ♕xa6 ♖c1+) 2. ... ♖c1+ 3. ♕f1 (capture an unprotected piece)
8) 1. ♕c3+ ♔g8 2. ♖xe1 dxe1♕ 3. ♕xe1 (twofold attack thanks to X-ray protection)
9) 1. ♗b3 ♖d7 2. ♖c8+ ♔g7 3. fxe5 (intermediate move)

Route planner

(4-2)	(4-3)
♖g7	♘d2
♖c6	♖h2
♖g5	♖g7
♗d7	♗e2
♗e8	♗f4
♘e5	♘c4

5: Winning material B

1) 1. ♖d8 ♔h7 2. ♕xe8 ♘xe8 3. ♖xa8 (intermediate move)
2) 1. ♗c4+ ♔d6 2. ♗xb3 ♔xc5 3. ♗xf7
3) 1. ♖d8+ ♔h7 2. ♕g8+ (double attack)
4) 1. ♕d5+ ♖f7 2. ♗xg7 (2. ♕xc6? ♗xh6+) (double attack + intermediate move)
5) 1. ♘b4 ♘d2 2. ♗c4+ (intermediate move)
6) 1. ♕a7 ♕b8 2. ♕xb8+ (2. ♖xd7? ♖b1#) 2. ... ♖xb8 3. ♖xd7 (intermediate move + capture an unprotected piece)
7) 1. ... ♖c8 2. ♗xe5 f5 3. ♕xd4 ♘xe5 (intermediate move)
8) 1. ♘d6 ♗e7 2. ♘xc8 (2. ♖xc8? ♗xd6) (twofold attack)
9) 1. ♘d6 ♗xe5 2. ♘f7+ (2. ♘xc8? ♖f1#) (2. ♖xc8? ♗xd6) 2. ... ♔g8 (2. ... ♖xf7 3. ♖xc8+) 3. ♘xe5

(double attack)

Attack safely

(1-3)	(2-1)
♗f6	♘c6
♗f5	♗h6
♗h4	♗f2
♘e6	♗a4
♘b1	♘d1
♘e6	♘c3

6: Winning material C

1) 1. d7 ♘xd7 2. ♗f5+ ♔h8 3. ♕xd7 (intermediate move)
2) 1. ♕e6 ♖e7 2. ♕f5+ ♔g8 3. ♕xc8+ (intermediate move)
3) 1. ♕d6 ♖axb7 2. ♖xb7 ♖xb7 3. ♕xb8 (twofold attack thanks to X-ray protection)
4) 1. ♔a1 ♗f5 2. c8♘+ (double attack)
5) 1. ♖d8+ ♔h7 2. ♕xc5 (♕h8# is illegal) 2. ... ♖xc5 3. ♖xa8; also 2. ♖h8+ ♖xh8 3. ♕xc5 wins. (luring away+material)
6) 1. ... ♘c6 2. ♗f3 ♘xd4 3. ♗xd5 ♘e2+ (double attack)
7) 1. ♘d6 ♖e1+ 2. ♔f2 (double attack)
8) 1. ♖af1 ♖hf8 2. ♖xf8 ♕xh4 (2. ... ♕xf8 3. ♖xf8) 3. ♖1f7# (luring away+ material)
9) 1. ♕xe4 ♖xa4 2. ♕c2 ♕d7 3. ♖c8+ (double attack)

Capture an unprotected piece

(4-2)	(4-3)
♕xg6	♖xb4
♕xh4	♖xf5
♕xd5	♕xg6
♕xc4	♕xc4
♕xd4	♕xf8
♕xe4	♕xe2

7: Eliminating the defence A

1) 1. ♗d6 ♖e8 2. ♗b4 wins ♞a4 (chasing away+material)
2) 1. f4 ♘c6 2. ♗xc6 ♗xc6 3. ♖xe7 wins ♝e7 (capturing+material)
3) 1. ♗b5 ♗d7 2. e6 wins ♞c6 (luring away+material)
4) 1. ♖xd8 ♖xd8 2. h5 wins ♝e7 (2. ... h6 3. ♘xe6) (chasing away+material)
5) 1. ... b5 2. ♘e3 ♘h7 wins ♘e3 (chasing away+material)
6) 1. ♖ch1 ♖h8 2. ♗xg6 ♖xh5 (2. ... ♔xg8 3. ♖xh8) 3. ♗xh5 (capturing/luring away+material)
7) 1. ♖d4 ♘b6 2. ♖f4 wins ♜e6 (chasing away+material)
8) 1. ♕xg7 ♘g6 2. ♘e5 (2. ... ♕c7 3. ♘xg6) 2. ... ♘xe5 3. ♕xh8+ (luring away/capturing+material)
9) 1. ... ♘b4 2. ♖fa1 ♘xc2 3. ♕xc2 ♗xb3 (capturing+material)
10) Drawing
11) 1. ♖d7 ♕c5 2. ♗e3 wins ♞c7 (chasing away+material)
12) 1. ♕e2 ♕xd4 2. ♖d1 wins ♞g4 (chasing away+material)

8: Eliminating the defence B

1) 1. ... ♕c8+ 2. ♔b4 ♘c2+ wins ♛c3 (chasing away+material)
2) 1. ♕c2 ♗f5 2. g4 wins ♞e4 (luring away+material)
3) 1. a5 ♖b8 2. bxc6 wins ♝d5 (capturing+material)
4) 1. ♖c7 ♖c8 2. g4 hxg4 3. hxg4 wins ♜c8 (chasing away+material)
5) 1. ♖xc7 ♖c8 2. ♗b5 ♕e6 (2. ... ♕d8 3. ♕xf7+) 3. ♕xe6 (chasing away+material)
6) 1. ♘b6+ ♔c7 2. ♘xd7 ♖xd7 3. ♕xf8 (luring away+material)

7) 1. ♘g5 ♕c7 2. ♘xf7 ♕xf7 3. ♕xd8 (chasing away+material)
8) 1. ♗xc6 ♘d4 2. ♘e8 wins ♞d4 (chasing away+material)
9) 1. h4 ♘f3 2. ♖c2 wins ♞f3 (chasing away+material)
10) 1. ♕e8+ ♕f8 2. ♗c4+ (2. ♗h7+? ♔xh7 3. ♕xf8 ♖d1+) 2. ... ♔h7 3. ♕xf8 ♖d1+ 4. ♗f1 (chasing away+material)
11) 1. ♖g2 ♕e5 (1. ... ♕h3? 2. ♖xg5+) (1. ... ♕f4? 2. ♕xf4) (1. ... f5? 2. ♖xg5+) 2. ♖xg5+ (luring away+material)
12) 1. c4+ ♔d4 2. ♖g4+ (2. ♖d6+? ♔c5) (chasing away+material)

9: Mate / Visualising A

1) 1. ♘b7 ♔b5 2. ♕c4#
   1. ♘b7 ♔xb7 2. ♕c8#
   1. ♘b7 ♗xb7 2. ♕a4#
   1. ♘b7 b5 2. ♕c6#
2) 1. ♖g1 ♔xh6 2. ♗f4#
   1. ♖g1 ♔h8 2. ♗e5#
   1. ♖g1 ♔f8 2. ♗d6#
   1. ♖g1 ♔f6 2. ♗h4#
3) 1. ♗g3 a5 2. ♕b5#
   1. ♗g3 ♗b7 2. ♕d6#
   1. ♗g3 ♔d7 2. ♕e8#
   1. ♗g3 ♔b6 2. ♕c7#
4) 1. ♕g2 ♔e5 2. ♕e4#
   1. ♕g2 ♔c3 2. ♗f6#
   1. ♕g2 ♔c5 2. ♗f2#
   1. ♕g2 ♔e3 2. ♕f2#
5) 1. ♕f3 d2 2. ♖a4#
   1. ♕f3 d4 2. ♕f7#
   1. ♕f3 ♔b3 2. ♕xd5#
   1. ♕f3 ♔d4 2. ♕f4#
6) 1. ♘h5 ♔xh5 2. ♗e8#
   1. ♘h5 ♔h7 2. ♗c₂#
   1. ♘h5 ♔f5 2. ♕f6#
   1. ♘h5 ♔f7 2. ♕e8#

Mate? Yes or no

(4-2)	(4-3)
no	no
yes	yes
no	no
no	no
no	no
no	yes

10: Mate / Visualising B

1) 1. ♕h7 g1♕ 2. ♕c2#
   1. ♕h7 g1♘ 2. ♕h2#
   1. ♕h7 f5 2. ♕a7#
   1. ♕h7 ♔g1 2. ♗c5#
2) 1. ♕h8 g4 2. ♕e5#
   1. ♕h8 ♔xf5 2. ♘e5#
   1. ♕h8 ♔g3 2. ♕h2#
   1. ♕h8 ♔e3 2. ♕d4#

3) 1. ♘c5 ♔c3 2. ♘a4#
1. ♘c5 ♔c1 2. ♘d3#
1. ♘c5 ♔a1 2. ♗d4#
1. ♘c5 ♔a3 2. ♘c4#
4) 1. ♘c4 d5 2. ♕f7#
1. ♘c4 ♔d5 2. ♕d6#
1. ♘c4 ♔f5 2. ♕xd7#
1. ♘c4 d6 2. ♕f7#
5) 1. ♗a3 ♔d6 2. ♖c4#
1. ♗a3 ♔d8 2. ♖d4#
1. ♗a3 ♔f6 2. ♖f4#
1. ♗a3 ♔f8 2. ♖g4#
6) 1. ♖a4 ♔c4 2. ♕d3#
1. ♖a4 d5 2. ♕f4#
1. ♖a4 ♘d8 2. b5#
1. ♖a4 e5 2. ♕d3#

Mate in one

(4-2)	(4-3)
♕f8#	♕a7#
♕g5#	♕f8#
♕a7#	♕f7#
♕d7#	♕c8#
f8♕#, f8♖#	♖f8#
♕a7#	♗f3#

11: Double attack A

1) 1. dxc5 ♗xc5 (1. ... ♘d7!) 2. ♕a4+
2) 1. ♖d1 ♖xc2 2. ♕f5
3) 1. ♗xa6 ♖xa6 2. ♕b7
4) 1. ♕xa5 ♖c1 2. ♕d2+
5) 1. ♘ac3 ♕xa3 2. ♘b5 ♕a2 3. ♘xd4
6) 1. ♖ad1 ♕c6 2. ♗e7
7) 1. ♕f3 ♘e5 (1. ... d5!) 2. ♕f6
8) 1. ... b5 2. ♘d2 ♗c2
9) 1. ♘d4 ♖c3 2. ♘b5 a6 (2. ... ♖b8 3. ♘c7#) 3. ♘xc3
10) 1. d5 ♗xd5 2. ♕d4
11) Drawing
12) 1. ♘xh7 ♔xh7 2. ♕c2+ and 3. ♕xc6

12: Double attack B

1) 1. ... b5 2. h5 ♕g5+
2) 1. ♔c3 ♘e5 2. ♖f5+
3) 1. ... ♗f7 2. ♘f4 ♖c4
4) 1. ♖xf4 ♖xh4 2. ♖g4+
5) 1. ♘c5 ♖xe5 2. ♘d3
6) 1. ... ♘bd4 2. ♘c3 ♘e6
7) 1. ♖d2+ ♔e7 2. ♖e2+
8) 1. b5 ♖xa3 2. ♕b4
9) 1. ♕f4 ♗xb2 2. ♕b4
10) 1. ♔h2 ♖xc2 2. ♕a3
11) 1. ♕e3 ♗xg5 2. ♕c5

12) 1. ♕xe4 ♗f5 2. ♘e7+

13: Double attack C

1) 1. ♕b8+ ♔f7 2. ♕f4+ (2. ♕a7+? ♖e7)
2) 1. ♕d4 ♘f6 2. ♕b4+ (2. ♕d8+? ♕e8+)
3) 1. ♖d2 ♖xd5 2. ♕g2+ (2. ♕e6+? ♗f7)
4) 1. ♕b3 ♖xg2 2. ♕h3 (2. ♕xd5+? ♗c6)
5) 1. h3 ♘e5 2. ♕g3 (2. ♕d6? ♖e8)
6) 1. ♕g3 ♖xb2 2. ♕c3 (2. ♕e5? ♗a3)
7) 1. ♕xe5 ♖xa3 2. ♕c5 (2. ♕d6? ♖c3) (2. ♕e7? ♖c3)
8) 1. ♕xf7 ♕xf7 2. ♘fd6+ (2. ♘ed6+ ♔c7 3. ♘xf7 ♗xf5) 2... ♔c7 3. ♘xf7
9) 1. ♕f3 ♗f7 2. ♕c3 (2. ♕f6? ♘e6)

Double attack

(4-2)	(4-3)
♕e4+	♕h7+
♕c4+	♕e1+
♕c2+	♕g2+
♕e3+	♕g4+
♕h8+	♕a3+
♕b8+ (♕f2+? ♖f7)	♕g8+

14: Clever ways out of check A

1) 1. ♗xc5 ♗xe2+ 2. ♔xe2 (2. ♕xe2? ♕h1#) (prevent mate)
2) 1. ... ♕f3 2. ♘xh7+ ♔g8 (2. ... ♔e7 3. ♕c7#) (prevent mate)
3) 1. ♔f1 ♕d3+ 2. ♔g1 (2. ♔e1 ♗a5#) 2. ... ♕d1+ 3. ♘e1 (prevent mate)
4) 1. ♗g1 ♖xe4+ 2. ♔f3 ♖xh4 3. ♗xc5 (win material)
5) Drawing
6) 1. ♕a3 ♘h3+ (1. ... ♘f3+ 2. ♔h1) 2. ♔h1 (2. ♔f1 ♕b5+) 2. ... ♘xf2+ 3. ♔g1 (prevent mate)
7) 1. ♔g2 (1. ♔g4 ♖g7+ 2. ♔f5 ♖f8+) 1. ... ♖g7+ 2. ♔h1 (2. ♔f2 ♘d3#) 2. ... ♖h8+ 3. ♖h2 (prevent mate)
8) 1. ♘d3 ♗e5+ 2. ♘xe5+ (2. f4? ♕xe2) (prevent material loss)
9) 1. ♕xd4 ♕a5+ 2. b4 ♕c7 3. ♕xg4 (win material)
10) 1. ♕xb1 ♕c1+ 2. ♖d1 (prevent mate)
11) 1. c5 ♕d4+ 2. ♗e3 (win material)
12) 1. ... ♔a7 2. ♕d4+ c5 (2. ... ♕xd4? 3. ♗xd4+ c5 4. ♗xc5#) (prevent mate)

15: Clever ways out of check B

1) 1. ♘xc5 ♕d5+ 2. e4 (prevent material loss)
2) 1. ... ♖xg4 2. ♘c6+ ♔c8 (2. ... ♔e8 3. ♖d8#) (prevent mate)
3) 1. ... fxe5 2. ♗c4+ ♘d5 3. ♗xd5+ ♔h7 (limit material loss)
4) 1. ... ♗c6 2. ♖d8+ ♔f7 (prevent material loss)
5) 1. ... ♖xc3 2. ♕g3+ ♘g4+ (win material)
6) 1. ... ♖c8 2. ♕xc8+ ♘xc8 3. ♖xc8+ ♕f8 (prevent mate)
7) 1. ... ♕a5 2. ♕c8+ ♕d8 (2. ... ♖xc8 3. ♖xc8+ ♕d8 4. ♖xd8#) 3. ♗xd8 (prevent mate)
8) 1. ♖xb1 ♕xb1+ 2. ♕d1+ (2. ♖d1 ♖e1+) (prevent mate)
9) 1. ♖xd6+ cxd6+ 2. ♔d2 (2. ♔b1 e1♕+) (limit material loss)
10) 1. ... ♖xe5 2. ♕c4+ ♗e6 3. ♕c3 (prevent material loss)
11) 1. ♕xb6 ♕b8+ 2. ♘d6+ (win material)
12) 1. ♖ee2 ♖xg2+ 2. ♕xg2 ♖xg2+ 3. ♔xg2 (prevent material loss)

16: Clever ways out of check C

1) 1. ... ♘c5 2. ♕b5+ c6 (win material)
2) 1. ... ♖xg3 2. ♗e4+ ♘c6 (win material)
3) 1. ♔h5 g6+ 2. ♕xg6 (2. ♔g4 h5#) (2. ♔xh6 ♕h4#) 2. ... fxg6+ 3. ♔xg6 (prevent mate)
4) 1. ... ♔h7 2. ♕c7+ ♖d7 (2. ... ♔h6 3. ♕h2+) (2. ... ♔g8 3. ♕g7#) 3. ♕xd7+ ♔h6 (prevent mate)
5) 1. ♗xc6 ♗c5+ 2. ♗d4 ♗xd4+ 3. ♔h1 (prevent material loss)
6) 1. ... ♕xd4 2. ♕d8+ ♔e6 (2. ... ♔c6 3. ♕c7#) (2. ... ♔e5 3. ♕e7#) (prevent mate)
7) 1. ♖d3 ♘d4+ 2. ♕xd4 (2. cxd4 ♕xd7) (2. ♖xd4 cxd4) (win material)
8) 1. e7 ♗b6+ 2. ♕xb6 (2. ♔g3 ♕g5#; 2. ♔g2 ♕xe2+; 2. ♔f1 ♕d1+) (win material)
9) 1. ♘d6 ♗h5+ 2. g4 ♗xg4+ 3. f3 (win material)
10) 1. ... ♖xa2 2. ♕b3+ ♔c8 (2. ... ♔a7 3. ♕xa2+) (2. ... ♔c6 3. ♕b5+ ♔d6 4. ♕d5#) (prevent material loss)
11) 1. ♗b5 ♕e4+ 2. ♔a1 (2. ♔a2 ♕d5+) (2. ♔c1 ♕e3+) (prevent material loss)
12) 1. ... ♕f7 2. ♕a8+ ♔h7 (2. ... ♕f8? 3. ♕d5+) 3. ♕e4+ ♕g6+ (prevent material loss)

17: Blind chess / Short games A

1:	3. ... ♘xe5	4. ♘xd5	3. ♗xg7
2:	4. ... ♘xd4	4. ♘xe5	4. ... ♕xg5
3:	4. ♗xb7	4. ♕xg4	4. ♕xg4
4:	4. ... ♘xg5	4. dxe5	4. ♗xg7
5:	4. ♕xg7	4. ... ♗xf4	4. ♘xb4
6:	4. e5 (and 5. exf6 or 5. ♕xa8)		
7:	5. exf6		
8:	5. dxc6		
9:	5. dxc5		

18: Tactics in the opening A

1) 1. ♕g3 g6 2. ♕c3 (double attack)
2) 1. ♕xb5+ c6 2. exf6 (intermediate move)
3) 1. ♗xc6 bxc6 2. ♕d4 (double attack)
4) 1. e6 ♕e7 2. ♕f7+ ♕xf7 3. exf7# (mate in two)
5) 1. ... b5 2. ♗xb5 ♕b6 (double attack)
6) 1. ... dxe4 2. ♘xe5 ♕a5+ (double attack)
7) 1. ♗b5+ ♔d8 2. ♖e1 (pin)
8) 1. ♕e2 ♗xf3 2. ♘f6# (mate in one by double check)
9) 1. ♕xb7 ♕c6 2. ♗b5 (pin)
10) 1. b4 ♗b6 2. ♘xb6 ♗xc4 3. ♘xc4 (3. ♘xa8 ♕xa8 wins less material) (discovered attack)
11) 1. ♗e6+ ♗xe6 (1. ... ♔b8 2. ♕f8+) (1. ... fxe6 2. ♕c7#) 2. ♕xg2 (eliminating the defence)
12) 1. ... ♘xd4 2. ♕xg7 ♘xc2+ 3. ♔e2 ♕d3# (3. ... ♘xa1 4. ♘xe4) (mate in two)

19: Tactics in the opening B

1) 1. ... d5 2. exd5 ♗c5 (pin)
2) 1. ♘c3 ♘xd4 2. ♕a4+ ♘c6 (2. ... c6 3. ♕xd4) 3. ♕xg4 (double attack)
3) 1. ♘e5 ♘xe5 2. ♕xa7+ ♔c8 3. ♕a8# (eliminating the defence)
4) 1. ♘c3 ♖xb2 2. 0-0-0+ (double attack)
5) 1. ♘e5 ♕g5 2. ♘f3 (eliminating the defence)
6) 1. ♖c4 d6 2. e5 (discovered attack)
7) 1. ♕xf7+ ♘xf7 2. ♘f6+ gxf6 3. ♗xf7# (mate in two)
8) 1. ♘h4 g5 2. ♕h5+ ♔e7 3. ♘f5# (mate in two)
9) 1. ... c5 2. dxc6 ♗c5 (eliminating the defence)
10) 1. ... hxg5 2. hxg5 ♕xf2+ 3. ♕xf2 ♗xf2+ 4. ♔xf2 ♖xh1 (intermediate move)
11) 1. ♘xe5 ♕xe5 2. ♘d5 (discovered attack)
12) 1. ... cxd5 2. ♗xd5 (2. ♕xd5 ♘b6 3. ♕xd8 ♖xd8) 2. ... ♘f6 (double attack)

20: Mate / Visualising C

1) 1. ♕e2+ ♔c3 2. ♘e4#

1. ♕e2+ ♔a3 2. ♗c5#
1. ♕e2+ ♔a1 2. ♗d4#
1. ♕e2+ ♔c1 2. ♗e3#

2) 1. ♕f5 ♔h6 2. ♕xh7#
1. ♕f5 ♔h4 2. ♕h3#
1. ♕f5 ♘xg5 2. ♕xg5#
1. ♕f5 ♘f6 2. ♘f3#

3) 1. ♕d7 ♔c5 2. ♕d6#
1. ♕d7 ♔a3 2. ♗d6#
1. ♕d7 ♔xa5 2. ♕b5#
1. ♕d7 ♔c3 2. ♗e1#

4) 1. f3 ♘g1 2. f4#
1. f3 ♘d4 2. ♕b8#
1. f3 ♘f4 2. d4#
1. f3 f4 2. ♕c5#

5) 1. ♗g4 ♗xh6 2. ♗h5#
1. ♗g4 ♔xh6 2. ♕f6#
1. ♗g4 ♔f7 2. ♕e6#
1. ♗g4 ♗a3 2. ♕g7#

6) 1. ♖f3 ♘g5 2. ♖f4#
1. ♖f3 f5 2. ♖e3#
1. ♖f3 fxe5 2. ♕d3#
1. ♖f3 ♔xf3 2. ♕e2#

Mate? Yes or no

(4-2)	(4-3)
yes	no (♖g7)
no (♗h6)	no (♔c8)
no (♘xe8)	no (♗b8)
no (♔g7)	yes
yes	no (♔xb6)
yes	yes

21: Mate / Visualising D

1) 1. ♘d6 ♔xd6 2. ♕h2#
1. ♘d6 ♔b6 2. ♘d5#
1. ♘d6 ♔d8 2. ♕a5#
1. ♘d6 ♔b8 2. c7#

2) 1. ♕e8 ♔xg4 2. ♕e4#
1. ♕e8 hxg4 2. ♕h8#
1. ♕e8 ♗xg4 2. ♕e1#
1. ♕e8 ♗f1 (or ♗g2) 2. ♕xh5

3) 1. c4 dxc3 2. ♖xc3#
1. c4 d3 2. ♕d5#
1. c4 ♘f4 2. ♕c7#
1. c4 ♔xc4 2. ♕b5#

4) 1. ♕g4 c4 2. ♕d4#
1. ♕g5 ♔e5 2. ♕xg5#
1. ♕g5 e5 2. c4#
1. ♕g5 ♘f3 (or any other knight move) 2. ♕e4#

5) 1. ♕h2 ♔c3 2. ♕b2#
1. ♕h2 ♔xe3 2. ♕f4#

1. ♕h2 ♔c5 2. ♕d6#
1. ♕h2 a3 2. ♕e5#

6) Drawing

Mate in one

(4-2)	(4-3)
♖b7#	f8♕#
♕d6#	♘c6#
♕f8#	♗c3#
♘e6#	♗e4#
g4#	♕c5#
g7#	♕b4#

22: Discovered attack A

1) 1. ♗e3+ ♔d6 (1. ... ♔b5 2. c4#) 2. e5+
2) 1. b4 ♕d5 2. e4
3) 1. b4 ♘d7 2. d6 ♕xd6 3. ♗xb7
4) 1. e5 ♖xd4 2. ♘ce2
5) 1. ... ♕xb7 2. ♕e4 d5 3. cxd5 ♗xa3
6) 1. ♗b2 ♕a5 2. b4
7) 1. ♖d4 b3 2. e5+
8) 1. ♖xe6 ♕d7 2. ♖xh6 gxh6 3. ♕xd7
9) 1. f4 ♘c6 2. ♘e6
10) 1. ♘e3 ♗xc6 2. ♘d6
11) 1. cxd5 ♗xd5 2. e4 ♗xb3 (2... ♔b7 3. exd5) 3. ♗a6#
12) 1. ♗c2 ♘cxe4 2. ♘f5 ♖a7 3. ♗xe4

23: Discovered attack B

1) 1. ♗xe3 ♗c3 2. ♗b6+ (2. ♗g5+? ♗f6)
2) 1. ♖d1+ ♔e8 (1. ... ♔c7? 2. ♕d6#) 2. ♗c6+ (2. ♗xg6+ ♘xg6) 2... ♘xc6 3. ♕xh4
3) 1. ♕h8+ ♔e7 2. ♘c6+! (2. ♘f5+? ♗xf5 3. ♕d8+ ♔e6) 2... ♖xc6 3. ♕d8#
4) 1. ♗b3 ♕a3 2. ♗g8+ (2. ♗c2+? ♘xc2)
5) 1. ♗d5 ♖d8 2. ♗b7 (2. ♗xf7+? ♖xf7+)
6) 1. ♖xc8+ ♘xc8 2. ♗b5 (2. ♗g4? ♕c6; 2. ♗a6? ♕d7)
7) 1. ♕c3 ♗g4 2. ♘e5+ (2. ♘xe7+? ♖xe7 3. ♕xc8 ♗xc8) 2. ... dxe5 3. ♕xc8
8) 1. ♘xe7+ ♕xe7 2. ♗h7+ (2. ♗d5+? ♘e6)
9) 1. ♕f4 ♘g4 2. ♘c6+ (2. ♘g6+? ♔d8)
10) 1. ... ♗g7
    2. ♕h2 ♘f3+
    2. ♕b8 ♘c6+
    2. ♕xe7 ♘c6+ / ♘f5+
    2. ♕c7 ♘b5+ / ♘e6+
    2. ♕e1 ♘c2+ / ♘f3+
    2. ♕c5 ♘b3+ / ♘e6+
    2. ♕g5 ♘f3+ / ♘e6+
    2. ♕g3 ♘e2+ / ♘f5+
    2. ♕e4 ♘e2+ 3. ♔a2 ♘c3+
    2. ♕d5 ♘b5+ 3. ♔b1 ♘c3+

24: Defending against mate A

1) 1. e7 ♖f5 (1. ... ♖h8 2. e8♕) 2. ♖e5
2) 1. ... ♗xc6 2. ♖xc6 ♕b5
3) 1. ♔d4 ♖g3 2. e5
4) Drawing
5) Drawing
6) 1. ... ♕xd4 2. ♕h5 f5
7) 1. ♔f1 ♖f8 2. c3 (2. ♖e2? ♕h1#) (2. ♔e2? ♖xf2+)

8) 1. ♖a3 ♘h3 2. ♗e5+ ♔c8 3. ♖xh3
9) 1. ♕xc7 ♕xd4 2. ♗e2 ♕a1 3. ♗f1
10) 1. ♗xd6 ♘e4 2. ♗b4+ ♔xa4 3. ♗e1
11) 1. ... ♖f8 2. ♕g4 ♖g8 (2. ... g6? 3. ♕d4+) (2. ... ♖xf7? 3. ♕xc8+) (2. ... ♕xg4? 3. ♖xf8#)
12) 1. e5 ♖h6 2. ♔f1

25: Defending against mate B

1) 1. ♕xb1 ♖xg7 2. ♕b8 ♖h7+ 3. ♕h2+
2) 1. ♕xa2 (1. ♕f4+ ♔g6) (1. ♕h6+ ♔f5) 1. ... ♕h3 2. ♕a6+ ♔g7 3. ♕f1
3) 1. ♖xh6 ♖g3 2. ♖g6+ ♖xg6 3. ♘xg6
4) 1. ... ♔g8 2. ♕b7 ♕h8
5) 1. ♔a2 ♕d1 2. b3 (2. ♘f6 b3#) (2. ♕b1 ♕a4#)
6) 1. ... ♕xg4 2. ♕h6 ♗h7 (2. ... ♘e6? 3. ♕h8#) (2. ... ♕h5? 3. ♕g7#)
7) 1. ... ♖xc2 2. ♘f5 f6 (2... ♗xf5? 3. ♖e8#) 3. ♕e3
8) 1. ... ♕c7 2. ♘e8 ♕c3
9) 1. f4 ♖gxg2 2. ♔b1

Defending against mate

Example below the diagram: ♔h3 ♙g4 ♕d2 ♞f1 g5

The pawn move g4-g5 creates the escape square g4. Moving away the king doesn't work: ♔h4? ♕h6#

(4-2)	(4-3)
g4 (g3)	a3 (a4)
bxc3	b3
♗b7	♔b1
♕a7+	♕h1
♖xf2	♕h3
♔b1	g8♘+ (1. g8♕? ♕f6+ 2. ♕g7+ ♕xg7#)

26: Double attack D

1) 1. ♗h6+ ♗g7 (1. ... ♔g8 2. ♕a3) 2. ♕a3+
2) 1. d5 ♘a5 2. ♕c3
3) 1. ♖b3 ♖xb2 2. ♖gxb7+ ♔a8 3. ♖xb2
4) 1. ... ♖xd3 2. ♖d1 ♕d5+ (2. ... ♖xg3+? 3. hxg3 ♕xc2 4. ♖d8#)
5) 1. ♘e6 ♖b7 (1. ... ♘g8!) 2. ♘f8
6) 1. ♗xc5 ♗h3 (1. ... ♗h1 2. f4) 2. f3 ♕xc5+
7) 1. h4 ♖xe2 2. ♔f3 b2 3. ♖f8#
8) 1. ♗d4+ ♔a5 2. ♔c7 ♔b4 (2... ♖e8 3. ♗c3#) 3. ♔xb8
9) 1. ♖xd5 exd5 2. ♘f5
10) 1. ♘d6 ♖b6 2. ♖xf7 ♖b8 3. ♖xd7
11) 1. ... e1♕ 2. ♗xe1 ♖xe1 3. ♘d3 (threatens 4. ♘xe1 and 4. ♖b6#); 3. ♖b6+? ♔d7
12) 1. ♔d6 ♖xe5 (1. ... ♖f1!) 2. ♖a7 (2. ♖b7? ♔c8 3. ♖c7+ ♔b8)

27: Double attack / Visualising A

1) 1. ... ♖xe3 2. ♘c4
   2. ... ♖b3 3. ♘a5+
   2. ... ♖f3 3. ♗e4+
   2. ... ♖e8 3. ♘d6+
2) 1. ♘e3+ ♔e6 2. ♘f8+
   1. ... ♔xf4 2. ♘g2+ (2. ... ♔xf4 in the workbook should be 1. ... ♔f4 2. ____)
   2. ... ♔d6 3. ♘f5+
   2. ... ♔e7 3. ♘g6+ (3. ♘f5+)
3) 1. e3+ ♔e4 2. ♖c8
   2. ... ♕xc8 3. ♘d6+

2. ... ♕b1 3. ♘d2+
2. ... ♕b7 3. ♘d6+

4) 1. 1. f5
1. ... ♕g7 2. ♗a3#
1 .... ♕g5 2. ♘h7+
1. ... ♕h8 2. ♘d7+
1. ... ♔e7 2. ♘g8+
1. ... ♕f4 2. ♗a3+ ♔g7 3.♘h5+

5) 1. ♘e2+ ♔e5 2. d4+
2. ... ♔e6 3. ♘f4+
2. ... ♔d5 3. ♘f4+
2. ... ♔e4 3. ♘g3+
2. ... ♔f5 3. ♘g3+
1. ♘e2+ ♔c5 2. d4+ ♔d5 3. ♘f4+

6) 1. 1. ♘e6+ ♔e8 2. e5
2. ... ♕a8 3. ♘c7+
2. ... ♕c8 3. ♘g7+
2. ... ♕d7 3. ♗h5#
2. ... ♔d7 3. ♘d4+
2. ... ♕e4 3. ♗h5+ ♔d7 4. ♘c5+

7) 1. ♖a4 ♕g8 (1. ... ♕xa4 2. ♗e8+) 2. ♖a8
2. ... ♕xa8 3. ♗f3+
2. ... ♕b3 3. ♘d4+
2. ... ♕c4 3. ♖c8+
2. ... ♕d5 3. ♘b4+
2. ... ♕e6 3. ♘d4+ ♔b7 4. ♗f3+ (3. ♖a6+ wins too)
2. ... ♕h7 3. ♗g6 ♕xg6 4. ♖a6+

28: Double attack / Visualising B

1) 1. 1. ... ♘e5
2. ♕h3 ♘d3+ 3. ♔f1 ♘f4+
2. ♕a4 ♘d3+ 3. ♔f1 ♘c5+
2. ♕d1 ♘d3+ 3. ♔f1 ♘b2+
2. ♕e4 ♘d3+ 3. ♔d1 ♘f2+

2) 1. ... ♘b4
2. ♕h7 ♘d5+ 3. ♔e4 ♘f6+
2. ♕b3 ♘d5+ 3. ♔e4 ♘d2+
2. ♕d1 ♘d5+ 3. ♔e4 ♘c3+
2. ♕e2 ♘d5+ 3. ♔e4 ♘g3+

3) 1. h4+ ♔f5 2. ♔f2
2. ... ♕g6 3. ♘e7+
2. ... ♕d1 3. ♘e3+
2. ... ♔e4 3. ♘xf6+
2. ... ♔g6 3. ♘f4+

4) 1. ♖g7 b5 2. b4
2. ... ♕e5 3. ♘g6+
2. ... ♕e1 3. ♘g2+
2. ... ♕f8 3. ♘g6+
2. ... ♕d8 3. ♖h7+ ♔g5 4. ♘e6+

5) 1. ♘c3+ ♔a5 2. ♔g8
2. ... ♕xb2 3. 3. ♘c4+
2. ... ♔xb6 3. ♘d5+
2. ... ♕c5 3. ♘b3+

2. ... ♕f4 3. ♘b3+ ♔xb6 4. ♘d5+

6) 1. ... ♔g4
2. ♕a4 ♖f4+ 3. ♔e3 ♘d5+
2. ♕a5 ♖e8+ 3. ♔d4 ♘c6+
2. ♕c3 ♖f4+ (♖e8+ in workbook is wrong) 3. ♔e3 ♘d5+
2. ♕b3 ♖f4+ 3. ♔e3 ♖f3+
2. ♕a1 ♖f4+ 3. ♔e3 ♘c2+

7) 1. e4
1. ... ♕a8 2. ♖a1+
1. ... ♕c6 2. ♘b3+
1. ... ♕d8 2. ♘b7+
1. ... ♕a2 2. ♖a1 ♕xa1 3. ♘b3+
1. ... ♕e5 2. ♖a1+ ♕xa1 3. ♘b3+
1. ... ♕e5 2. ♖a1+ ♔b4 3. ♘d3+
1. ... ♕e5 2. ♖a1+ ♔b6 3. ♘d7+

29: Draws: Stalemate A

1) 1. cxd5 ♕xd5 2. ♕d3+ ♕xd3 stalemate
2) 1. ♖xa2+ ♕xa2 2. ♖b2+ ♕xb2 stalemate
3) 1. g7 ♖a8 2. g8♕ ♖xg8 stalemate
4) 1. a5+ ♔a7 2. ♕c5+ ♕xc5 stalemate
5) 1. ♕xf5 ♕xd6 2. ♕d7+ ♕xd7 stalemate
6) 1. ♕b2+ ♕b4 2. c3 ♕xb2 stalemate
7) 1. ♖xh1 gxh1♕ 2. ♕e5+ ♕xe5 stalemate
8) 1. ♔e5 ♕g7+ 2. ♔f4 ♕xd4 stalemate
9) 1. ♕xa2 ♕xb7 2. ♕g2+ ♔xg2 stalemate
10) 1. ♖e8 ♖xe8+ 2. g8♘+ ♔g6 stalemate (2. ... ♖xg8+? 3. hxg8♕)
11) 1. ♖h4 f2 (1. ... ♗g3 2. ♖xh2+ ♗xh2 3. ♔f2) 2. ♖h5 ♕xh5 stalemate
12) 1. ♖g7+ ♔e6 2. ♖f7 (2. ♖g1? fxg1♗!) 2. ... ♔xf7 stalemate

30: Draws: Stalemate B

1) 1. h3 h5 2. ♖c7 ♕xc7 stalemate (2. ... ♕e8 3. ♘xe8 stalemate)
2) 1. g8♕ ♗xc7 2. ♕c4+ (2. ♕a2 ♖xa2) (2. ♕g2+ ♖xg2) 2. ... ♖xc4 stalemate
3) 1. ♕xf6+ ♗xf6 (1. ... ♔e8 2. ♕xg7) (1. ... ♔g8 2. ♕xe7) 2. e6+ ♔f8 stalemate
4) 1. ♖xf3 g1♕ 2. ♖g3+ ♕xg3 stalemate
5) 1. b8♕ ♕b1+ 2. ♔c6 ♕xb8 stalemate
6) 1. ♖g3 ♗e6 (1. ... ♔e2 2. ♔xh3 f2 3. ♖xg2) 2. ♖xg2+ fxg2 stalemate
7) 1. ♗d6 c1♕ 2. ♗f4+ ♕xf4 stalemate
8) 1. ♖f5 (1. ♖hg5 ♕h6+ 2. ♖h7 ♕xg5 3. ♖f7+ ♔xf7) (1. ♖hh7 ♕e5 2. ♖h4 ♕xg7#) 1. ... ♕xf5 2. ♖f7+ ♔xf7 stalemate
9) 1. ♔b1 ♘xb3 2. e4+ ♔g5 stalemate (the e-pawn is pinned)

Mate (#), stalemate (=) or play (→)

(4-2)	(4-3)
stalemate	stalemate
♔h7	♔xb3
mate	mate
stalemate	stalemate
♔d7	♔a8
mate	mate

31: Winning material: yes or no? A

1) no 1. ♕a5 ♖b8 2. ♕xa4 ♕xd2

2) yes 1. ... ♕xc5 2. ♖fc1 ♕xf5 3. ♖xc7 ♕xb1+
3) no 1. ♗e3 ♗f7 2. ♕xf7? ♕d1+
4) yes 1. f4 ♕d8 2. ♗xc6 ♕d4+ 3. ♔g2
5) yes 1. ... ♖c8 2. ♘c7 ♖xc7 3. ♕d8+ ♘e8
6) no 1. ♘c4 ♕f5 2. ♗xd5? ♕b1+ 3. ♕f1 ♕xf1#
7) no 1. ... ♕xf5+ 2. ♖d3 ♕xf4? 3. ♖f3
8) no 1. ... ♖e8 2. ♘xd6? ♗d3+ 3. ♔g1 ♖e1+
9) yes 1. ... ♕f6 2. h5 ♕xf4 3. ♖xg6+ fxg6

32: Winning material: yes or no? B

1) no 1. ♗f4 ♘f6 2. ♗xd6? ♘e4
2) no 1. ♗b3 ♕e5 2. ♕xd5? (2. ♗xd5? ♕a1+) 2. ... ♕e1#
3) yes 1. ♗b6 ♖de8 2. ♖xd7 ♖xd7 3. ♖xd7 ♖e1+ 4. ♗g1
4) no 1. cxd4 ♘xd4 2. ♕xd4? ♖e1+ 3. ♖xe1 ♕xd4
5) no 1. ... ♗d7 2. ♖axb4? 2 (2. ♖bxb4? ♖xb4 3. ♖xb4 ♖xf3) 2. ... ♖xb4 3. ♖xb4 ♖xf3
6) yes 1. ♗xc5+ ♘xc5 2. ♖bxb4 (2. ♖axb4 ♖xb3)
7) yes 1. ... ♘xd5 2. ♘xd5 (2. ♗xd5? ♗xd5) 2. ... ♗xd5 3. ♗xd5+
8) no 1. ... cxd5 2. ♗xd5? ♗xd5 3. ♖xd5 ♖xe2 4. ♔f1 ♖e7
9) Drawing

33: Mate / Visualising E

1) 1. ♕e4 ♖a5 2. ♖xc6#
   1. ♕e4 ♖c5 2. ♖d7#
   1. ♕e4 ♔c5 2. ♖xc6#
   1. ♕e4 ♖e5 2. ♕xc6#
   1. ♕e4 ♖d5 2. ♕e7#
2) 1. ♕f4 fxg4 2. ♕xg4#
   1. ♕f4 gxh5 2. ♘f2#
   1. ♕f4 g5 2. ♕h2#
   1. ♕f4 ♔xh5 2. ♘f6#
   1. ♕f4 ♔h3 2. ♕h2#
3) 1. ♕g7 ♘e5 2. ♕g5#
   1. ♕g7 ♔xh4 2. ♕g4#
   1. ♕g7 ♖b8 2. ♕h7#
   1. ♕g7 ♖h6 2. ♕g4#
   1. ♕g7 ♘xh4 2. ♗g4#
4) 1. ♗e8 exf4 2. ♕e4#
   1. ♗e8 d5 2. ♕d7#
   1. ♗e8 ♔d5 2. ♕c4#
   1. ♗e8 ♔e7 2. ♕d7#
   1. ♗e8 ♔f5 2. ♗d7#
5) 1. ♕d5 ♖xa4 2. ♕b7#
   1. ♕d5 ♔xa4 2. ♕c6#
   1. ♕d5 ♖a6 2. ♖b4#
   1. ♕d5 ♖c7 2. ♖a5#
   1. ♕d5 ♖a8 2. ♕d7#
6) 1. ♗b1 ♔xb1 2. ♕c2#
   1. ♗b1 ♔a3 2. ♕a2#
   1. ♗b1 ♖a8 2. ♕xb4#
   1. ♗b1 b3 2. ♕c1#
   1. ♗b1 ♖a3 2. ♕c2#

Creating mate

(4-2) (4-3)

♕a1		♘f3	♗h3
♖a7	♘c6	♔c2	♕b1
♖b5	♘c7	♔e6	♖g8
♖b6	♘c4	♔b6	♖a8
♗a6	♗c7	♕b7	♗c6
♘c3	♘c6	♕a6	♗d6

34: Mate / Visualising F

1) 1. ♘c6 g6 2. ♕c4#
   1. ♘c6 ♖xc6 2. ♕f7#
   1. ♘c6 ♗d3 2. ♘b4#
   1. ♘c6 ♔e6 2. ♕f5#
   1. ♘c6 ♔xc6 2. ♕b5#
2) 1. ♖d5 e3 2. ♖e5
   1. ♖d5 cxd5 2. ♗d7#
   1. ♖d5 ♖f5 2. ♖d6#
   1. ♖d5 ♔xd5 2. ♗b3#
   1. ♖d5 ♖f7 2. ♕e5#
3) 1. ♕e7 ♗f2 2. ♕xd6#
   1. ♕e7 c5 2. ♕f6#
   1. ♕e7 ♗h2 2. ♕e3#
   1. ♕e7 d5 2. ♘e2#
   1. ♕e7 ♔c5 2. ♕a7#
4) 1. ♕a8 ♗d5 2. e4#
   1. ♕a8 ♗e5 2. ♕f3#
   1. ♕a8 ♖d4 2. ♕h8#
   1. ♕a8 ♗d4+ 2. e3#
   1. ♕a8 ♖d5 2. ♕e8#
5) 1. ♕e3 ♖a1 2. ♕d2#
   1. ♕e3 ♖b2 2. ♕c1#
   1. ♕e3 ♖c2 2. ♕g1#
   1. ♕e3 ♖xe2 2. ♕xe2#
   1. ♕e3 ♔c2 2. ♕b3#
6) 1. e4 dxe3 2. d4#
   1. e4 ♘f6 2. ♗xd4#
   1. e4 ♘b6 2. ♗b8#
   1. e4 ♘c5 2. ♖d5#
   1. e4 d3 2. ♕f5#

How many times mate? (? x #)

(4-2)	(4-3)
1x (♕g7)	3x (♕g2, ♕h4, ♕h5)
1x (♕g4)	2x (♕c8, ♕e7)
2x (♕c1, ♕e2)	2x (♕a1, ♕a7)
0x	2x (♕f8, ♕h7)
3x (♕a7, ♕d8, ♕h8)	2x (♘g6, ♕g8)
2x (♕a5, ♕b3)	1x (♕b7)

35: Test: Mix A

1) 1. ♕xc6 ♖ac8 2. ♕h6 (defending by moving away and protecting)
2) 1. ♕xd6 ♘g4 2. ♕f8+ ♔h7 3. ♕xg7# (mate in two)
3) 1. ... b5 2. ♘d2 ♗d4 (pin)
4) 1. ♕xf6+ ♔h6 (1. ... ♔g8 2. ♗c4+) 2. ♖d4 ♕g5 3. ♖h4+ (pinning and X-ray protection)

5) 1. ♕c3+ ♕f6 2. ♗f8+ (2. ♗d4 ♘a4+) (eliminating the defence: luring away+material)
6) 1. ♕h5 fxe4 2. ♕g4+ (eliminating the defence: capturing+material)
7) 1. ♕c5 ♘dc6 2. ♗xf7+ ♔xf7 3. ♕xc3 (discovered attack)
8) 1. ... ♕xd4 2. ♕f6 h6 (2. ... ♔g4 3. ♕g5#) (defending against mate by protecting)
9) 1. c4 ♗e6 2. ♖a1 (pin)
10) 1. a3 ♘c6 2. ♖xc6 bxc6 3. ♕xa5 (eliminating the defence: capturing+material)
11) 1. ... ♗c4 2. ♖xe5 ♕xf1+ 3. ♖xf1 ♖xf1# (mate in two thanks to X-ray protection)
12) 1. ... c5 2. dxc5 (2. ♕xb5 ♗xe4 3. ♘xe4 ♖xe4) 2. ... ♗xc3 (discovered attack)

36: Test: Mix B

1) Drawing
2) 1. ♗xf6 ♕b6+ 2. ♗d4 (getting out of check: winning material)
3) 1. ♗c5+ ♔xa6 2. c4 ♔a5 3. ♖a7# (threaten mate: bringing in the chaser)
4) 1. ♖dxh4 ♗g6 2. ♖xh7+ ♗xh7 3. ♖xh7# (mate in two thanks to X-ray protection)
5) 1. ♖c5 ♕f6 2. ♖g5+ (eliminating the defence: chasing away+material)
6) 1. ♕xg5 f6 (1. ... ♕xb7 2. ♕xd8+) 2. ♕a5 (defending by counter-attack)
7) 1. g7 d4+ 2. ♔b2 (2. ♔xd4? ♗b3) (2. ♔c4? ♔a4) (passed pawn)
8) 1. ♕c5+ ♘c6 2. ♕f8 (double attack: queen)
9) 1. ... a4 2. ♘c1 ♕h6 (double attack with two pieces)
10) 1. ♗c1 g5 2. ♕a2 (pin)
11) 1. ... ♕e5 2. ♕f6+ ♔g8 (getting out of check: preventing mate)
12) 1. ♘xd7+ ♘xd7 2. ♖xd7 ♖g2 3. ♖h7 (defending against mate)

37: Intermediate move A

1) 1. ♔f2 d5 2. ♗b5+ (counterattack with check)
2) 1. ♘xf3+ ♔g4 2. ♘h2+ (2. ♘e5+ ♔f5) (counterattack with check)
3) 1. ♗d3 ♗a3 2. ♕c7 (counterattack on an uncovered piece)
4) 1. e5 ♗xa4 2. ♖a1 ♘e4 3. ♖xa4 ♘xd2 4. ♘xd2 ♖c1+ 5. ♘f1
5) 1. ♗c3 ♗e5 2. d4 (counterattack on an uncovered piece)
6) 1. ♖c1 ♘d5 2. ♕a3 (counterattack on an uncovered piece)
7) 1. ♖ab1 ♖c8 2. ♕h5+ (counterattack with check)
8) 1. ... d4 2. g6? ♗d5 (counterattack with a mating threat)
9) 1. ♖ab1 ♗e3 2. ♕c2 (counterattack on an uncovered piece)

Attack all squares	**Square ? is attacked 3 times**
(4-2)	(4-3)
♕d2	g5
♕h2	c4
♕e8	h5
♕g6	e5
♕d1	b7

38: Intermediate move B

1) 1. a5 ♔e5 2. ♘g6+ (2. ♘d3+ ♔d4)
2) 1. ♘b6 ♗b4 2. ♖f2+ (2. ♖d7+ ♔e6) (counterattack on an uncovered piece)
3) 1. fxe5 ♘c5 2. ♕g4 (counterattack on an uncovered piece)
4) 1. ♕e6 ♖xa2 2. ♖f7 (counterattack on material)
5) 1. ... ♖xc1 2. ♖xb7 ♕c6 (counterattack with a mating threat)
6) 1. ♘c4 exd3 2. ♕xe7+ ♔xe7 3. ♘xa5
7) 1. ♘c5 ♖d8 2. g3 (counterattack and defending against a threat)
8) 1. ♘e2 ♘xf2 2. ♘d4 (counterattack on material)
9) 1. ... d4 2. ♘e4 ♕d5 (counterattack on an uncovered piece)
10) 1. ♘c3 ♖c8 2. ♕b3+ ♔h8 3. bxa6 (♘c3 defending with tempo)

11) 1. ♘e4 ♕c6 2. ♕g4 (pinning the attacker)
12) 1. c4 ♘xd4? (1. ... ♕xd4! 2. cxb5) 2. ♕e8+ (2. cxd5? ♘xe2+) 2. ... ♖xe8 3. ♖xe8+ ♔g7 4. cxd5 (sacrifice the attacker by exchanging - Desperado)

39: Avoiding stalemate A

1) 1. ♔e6 a2 2. ♘a1
2) 1. h6 ♔xh6 2. g8♖
3) 1. ... ♖xf1 2. ♔xf1 ♔g3
4) 1. ♖xb8 b1♕ 2. ♖a7+ ♔xa7 3. ♖xb1
5) 1. ♔g6 ♖xb6 2. ♖f6 ♖a6 3. h6
6) 1. ♕c2 d5 2. cxd6 ♕xc2
7) 1. e7 ♘g6 (1. ... g6+ 2. ♔e4) 2. e8♖
8) 1. ♔g1 (1. ♔f1? ♖e1+ 2. ♔f2 ♖f1+) 1. ... ♖e1+ 2. ♕f1 (2. ♔f2? ♖f1+)
9) 1. ... ♕xc8 2. c4+ ♕xc4 (2. ... ♔xc4 3. ♕xc8+) 3. ♕d6#
10) 1. ... ♗c6 2. ♘c5+ ♔b5 3. ♘e4
11) 1. ... ♔xe1 2. ♖xf3 ♖h1+ 3. ♔xh1 gxf3
12) 1. ... ♔e8 2. ♕d8+ (2. ♕c6+ ♕d7) 2. ... ♔f7 3. ♘g5+

40: Capturing: yes or no (👍 or 👎) A

1) 1. ♘c4 ♗xe3 2. ♘xe3 ♖c1+ 3. ♖d1 (👍) (there is no mate on the bottom rank.)
2) 1. ♖ac1 ♘e2+ 2. ♕xe2 ♕f4# (👎)
3) 1. ♘e4 d5 2. ♖xd5 ♕xd1+ 3. ♖xd1 ♖xd1# (👎)
4) 1. cxd5 ♘xd5 2. ♔xd5 (2. ♖xf6 ♘xf6+ 3. ♔f5 ♔c7) 2. ... ♖xf4 3. ♗xd6+ (👍) (White wins the rook back with a double attack.)
5) 1. f4 ♘xe4 2. ♕xe4 (2. ♕f3!) 2. ... ♗b7 (👎) (White cannot capture the knight on e4 because of a pin.)
6) 1. ♕d2 ♘xf4 2. ♕xf4 ♗g5 3. ♖xg5 (👍) (the material remains balanced).
7) 1. ... ♕xe5 2. ♖xe5 ♖d1+ 3. ♘xd1 ♖xd1+ 4. ♖e1 (👍) (there is no mate on the back rank.)
8) 1. cxd5 exd5 2. ♗xd5 cxd5 3. ♖b5# (👎)
9) Drawing

41: Capturing: yes or no (👍 or 👎) B

1) 1. ... ♗xc2 2. ♕xc2! ♘e3+ (2. ... ♘xf4+ 3. ♕e4) 3. ♕e4 (👍) (The queen saves herself by moving away and interposing.)
2) 1. ♗xd6 ♖xd6? (1. ... ♕f6!) 2. ♕h6+ ♖xh6 3. ♖xh6# (👎)
3) 1. ♘xh4 ♖xh4! 2. f4+ gxf3+ (👍) (The discovered check saves; White has no time to play ♖xh4.)
4) 1. ♖b8 ♘xa4? (1. ... ♘c4!) 2. ♖b3 (👎) (The knight has been trapped.)
5) 1. ♖xc5 ♗xc5 2. ♕xc5! (2. ♕xa6 ♕xd2 3. ♕xb7 ♗xf2+) 2. ... ♕xd2 3. ♕c8+ (👍) (White wins back the rook with a double attack.)
6) 1. bxa5 ♕xa5 2. ♕xf6+! (2. ♕xb7? ♕a1+; (2. ♗xe5? ♕xe5) 2. ... ♗xf6 3. ♗xf6# (👍)
7) 1. ... ♗xc5 2. ♖xc5! ♕xa3 3. ♖dc8 (👍) (White defends against the double attack and the bottom rank mate.)
8) 1. ... ♗xc5 2. ♖xc5? ♕e3 (👎) (Capturing is wrong because of a double attack.)
9) 1. ... ♗xc5 2. ♖xc5! ♕e3 3. ♖c8+ (👍) (An intermediate check prevents loss of material.)

42: Threaten mate A

1) 1. ♕e5+ ♗e6 2. ♕d6 (2. ♕c7? ♘d7) → 3. ♕e7#
2) 1. ♖f1+ ♔e5 2. ♖hf6 → 3. ♖1f5#
3) 1. c6 a2 2. b7 → 3. b8♘#
4) 1. ♗d3 b3 2. ♗h7 → 3. ♖f5#
5) 1. ♕f7+ ♔h6 2. ♘f2 → 3. ♘xg4#
6) 1. ♘b6+ axb6 (1. ... ♔b8 2. ♘xe6#) 2. ♘a8 → 3. ♘xb6#
7) 1. ♕xf3+ ♔xh6 2. ♕g4 (2. ... ♕xc4 3. ♘f5#) → 3. ♘xf7# → 3. ♘f5#
8) 1. ♕xh6+ ♔g8 2. ♘d7 (2. ♘xe4? ♗b7) → 3. ♘xf6#

9) 1. ♖xg7 g1♕ 2. ♖b7 → 3. ♖b8#

Mate / Visualising

(4-2)

♔c2 ♙b7 ♚a3 ♟a5

1. b8♕ ♚a2 2. ♕b2#; 1. ... ♚a4 2. ♕b3# ; 1. ... a4 2. ♕b2#

♔g6 ♕b2 ♚h8 ♗h6

1. ♕b7 ♚f8 2. ♕f7#; 1. ... ♚h8 2. ♕h7# ; 1. ... ♗g2 2. ♕g7#

♔c6 ♕h6 ♚a6 ♟b2

1. ♕e3 ♚a5 2. ♕a3#; 1. ... b1♘ 2. ♕b6# ; 1. ... b1♕ 2. ♕a3s#

43: Threaten mate B

1) 1. ♖xg6+ ♔h3 2. ♔g1 → 3. ♗f1#
2) 1. ♗xc4 a2 2. ♔g2 → 3. ♗e2# / 3. ♖xg6# (2. ... f4 3. ♗e6#)
3) 1. f4+ ♔h5 2. c3 → 3. ♗d1#
4) 1. ♘xd7 a2 2. ♘f8 → 3. ♖h7#
5) 1. ♘xd8 f2 2. ♖e8 → 3. ♘e6#
6) 1. d6 c2 2. ♗e8 → 3. ♖g6#
7) 1. ♖h4+ ♕h7 2. ♘f6 → 3. ♖g8#
8) 1. ♖xh7 e2 2. ♔b7 → 3. ♖d7#
9) 1. ♖xc7 h2 2. ♖g7 → 3. ♗d7#

Mate / Visualising

(4-2)

♔a5 ♕e5 ♗g1 ♚b7

1. ♗h2 ♚a8 2. ♕b8#; 1. ... ♚c8 2. ♕c7# ; 1. ... ♚c6 2. ♕b5#

♔d1 ♕h1 ♗g8 ♚b2

1. ♕d5 ♚b1 2. ♕a2#; 1. ... ♚a3 2. ♕b3# ; 1. ... ♚c3 2. ♕d2#

♔f6 ♕f7 ♙g2 ♚g4

1. ♕b3 ♚h5 2. ♕h3#; 1. ... ♚f4 2. ♕f3# ; 1. ... ♚h4 2. ♕h3#

44: Passed pawn A

1) 1. c6 ♘e4 2. c5
2) 1. b8♕+ ♗xb8+ 2. ♔b7
3) 1. ... d2 2. ♕xd6 ♖e1+ (2. ... ♖d7 3. ♕b8+)
4) Drawing
5) 1. ... c2 2. ♕a3 (2. ♔d2 ♘b3+) 2. ... ♘b3
6) 1. c7 ♗e5 2. ♘e7+ (2. ♘d6 ♗xd6+ 3. ♔a4 ♗xc7)
7) 1. ♗c5 ♖e1 2. ♗e3
8) 1. c7 ♕c2 2. ♖a8 ♕xc7 3. ♖h8#
9) 1. ... ♖g1 2. ♖ac5 ♖e1
10) 1. ... b3 2. ♔c3 ♗b4+
11) 1. ... ♔g6 2. ♘xd6 e4
12) 1. ♔h4 (1. ♔h6? ♖g6+) 1. ... ♖g1 2. ♘h5

45: Passed pawn B

1) 1. h6+ ♔g6 2. h7 (2. ♔f3? ♔g5) 2. ... ♔xh7 3. ♖xf6
2) 1. d7+ ♔e7 2. ♕c7 ♕d2 3. d8♕+
3) 1. h7 a2 2. h8♕ (2. hxg8♕ a1♕) 2. ... a1♕ 3. ♕d4#

4) 1. c7 ♕c1 2. ♕f5+ (2. c8♕? ♕h1#) 2. ... ♔h8 (2. ... g6 3. ♕d7+) 3. c8♕+
5) 1. g7 ♖xa7 2. ♔e8 ♖a8+ 3. ♗d8
6) 1. ♖f8+ ♔h7 2. ♖f7 ♔g8 3. ♖xg7+ ♔xg7 4. e8♕
7) 1. ♗c6 ♖e4 2. ♗d5+ (2. ♗xe4? ♔f7) 2. ...♔h8 3. ♗xe4
8) 1. e7 ♗f3 2. e4 ♗xe4 3. e8♕
9) 1. ... ♗xc7 2. ♔c3 ♗f4 3. ♘g4 e2
10) 1. ♗c4 ♖e1 2. c7 ♖e8 3. ♗a6
11) 1. f7 ♗g8 2. f8♗ ♗e6 3. ♘e7 ♗b3 4. ♗g7#
12) 1. c6 ♗b7 (1. ... e1♕ 2. c7#; 1. ... ♗a6 2. c7+ ♔c8 3. ♗e6+ ♔b7 4. c8♕+) 2. c7+ ♔a8 3. c8♕#

46: Defending against a passed passed pawn A

1) 1. ♔d7 a2 2. ♔e7 ♔f5 (2. ... a1♕ 3. ♗f6+ ♔f5 4. ♗xa1 ♔g4) 3. ♗f6
2) 1. ♔e3 b2 2. ♖e6+ (2. ♖b4 axb4 3. ♗e4 bxa3 4. ♗b1 ♔e5) 2. ... ♔xe6 3. ♗e4
3) 1. ♔xd5 b2 2. g3+ ♔xg3 3. ♗f5 ♔xh4
4) 1. ♖xg4 f2 2. ♖g5 f1♕ 3. ♖f5+ ♕xf5+ 4. ♔xf5
5) 1. ♗c6 e5 2. ♗h1 (2. ♗g2 ♔f2 3. ♗h1 g2 4. ♗xg2 ♔xg2 5. ♔d3 ♔f3)
6) 1. ♖xf3 e2 2. ♖e3 ♘xe3+ 3. ♔d2
7) 1. ♗b3 a2 2. ♗g5 met mate or anders 3. ♗xe5 (2. ♗g7+ lifts the stalemate, but after 2. ... ♔xg7 3. ♗xa2 ♔g6 4. ♔xe5 ♔g5 followed by h7-h5-h4 the last white pawn disappears)
8) 1. ♖xb5 a2 2. ♖b1 (2. ♖a5 ♗b4+ 3. ♔c2 ♗xa5 4. ♔b2 ♗b6 5. ♔xa2 ♗xf2) 2. ... axb1♕ 3. ♗xb1
9) 1. ♖e1 ♖d1 2. ♔h2 ♖xe1 (2. ... ♖d2 3. ♔g1)
10) 1. ♗b1 h2 2. ♘f2 (2. ♘g3 ♗xg3+ 3. ♔d7 h1♕) 2. ... ♗xf2 3. ♗e4
11) 1. g5 a3 2. ♗h8 a2 3. g6+ ♔xg6 (3. ... ♔g8 4. f7+) 4. f7 ♔xf7
12) 1. c4+ ♔a5 2. ♗f6 e1♕ 3. ♗c3+ ♕xc3+ 4. ♔xc3

47: Defending against a passed passed pawn B

1) 1. ♘d5 ♔d3 2. ♘e3 ♔xe3 3. ♗h6+
2) 1. ♖xa3 b2 2. ♘d1 b1♕ (2. ... b1♘ 3. ♖a2+) 3. ♖c3#
3) 1. ♖d3 ♗b4 2. ♖d4 (2. ♖d1? ♗a3)
4) 1. ♘c6 e2 2. ♘d4 e1♕ (2. ... e1♘ 3. b6) 3. ♘f3+
5) 1. ♘d4 g2 2. ♘e2 (2. ♘f3 ♘e5+ 3. ♘xe5 g1♕)
6) 1. ♗xd7 d2 2. b4+ ♔b6 3. ♗a4
7) 1. ♖xc5 ♕d1 2. ♕g1 (2. ♔g1 ♕d4+ 3. ♕f2 ♕d1+)
8) 1. ♖g4 ♘f3 2. ♖g5
9) 1. ♘xb7 ♗xb7 2. c6 ♗a8 (2. ... ♗a6 3. d6 ♗b5 4. d7)
10) 1. ♖xe5+ ♔f2 2. ♖e1
11) 1. ♖b8+ ♔a7 2. ♖e8
12) 1. g7+ ♔f7 2. ♖e7+ (forced, d1♕+ is with check) 2. ... ♔xf6 3. g8♘#

48: Mate in three A

1) 1. ... ♕g3+ 2. ♗xg3 ♖g1+ 3. ♔h2 hxg3
2) 1. ♘e7+ ♔h7 2. ♕g6+ fxg6 3. hxg6#
3) 1. ♖g8+ ♔f7 2. ♕e7+ ♔xg8 3. ♕f8#
4) 1. b8♕+ ♗xb8 2. ♘b7+ ♔c8 3. ♘e7#
5) 1. ... ♕d2+ 2. ♗e3 ♕d6+ 3. ♔g5 ♕xg3#
6) 1. ... ♕c5+ 2. b4 ♕a7+ 3. ♔b3 ♕a4#
7) 1. ♖xf8+ (1. ♖h8+ ♔xh8 2. ♕xf7 ♗e4+ 3. ♔a1 ♖g1+) 1. ... ♔xf8 2. ♖h8+ ♔g7 3. ♕h6#
8) Drawing GM Jan Smeets
9) Drawing GM Jan Smeets

Trapping

(4-2) (4-3)

♘e4	♖e6
♗a4	♖a7
♗d2	♖b7
♕d5	♖a2
♖c6	♘e4
♕b4	♖g5

49: Mate in three B

1) 1. ♕h6+ ♔e5 2. f4+ ♔d4 3. ♕f6#
2) 1. ♕h7+ ♔f6 2. ♗b2+ ♔g5 3. h4#
3) 1. ... ♕f1+ 2. ♔h2 ♕xh3+ 3. ♔g1 ♖d1#
4) 1. ♖g1+ ♔f8 2. ♕h6+ (2. ♕h8+ ♗g8+ 3. ♔b1 ♗d6 (3. ... ♖c1+)) 2. ... ♔f7 3. ♕g7#
5) 1. ♕g6+ ♔h4 2. ♕h6+ ♔g4 3. h3#
6) 1. ♕h4+ ♔f3 2. ♕h5+ g4 3. ♕xg4#
7) 1. ... ♕h6+ 2. ♔f6 ♕g7+ 3. ♔g5 ♕e7#
8) 1. ♖g3+ ♔f5 2. ♕g5+ ♔e4 3. ♖g4#
9) 1. ♘f6+ ♗xf6 2. ♖g7+ ♔f8 3. h8♕#

Where is the king mate?

(4-2)	(4-3)
♚d8	♚c8
♚a4	♚f8
♚d1	♚h8
♚e1	♚e8
♚e8	♚a5
♚h5	♚f6

50: Route planner: Mate A

1) 1. ♕a8 ♔b5 2. ♖xb3#
2) 1. ♕e7 ♔xg3 2. ♕h4#
3) 1. ♖a3 ♔b1 2. ♔d2#
4) 1. ♕h3 ♔e4 2. ♖c4#
5) 1. ♕g3 ♔e7 2. ♕d6#
6) 1. ♗b1 ♔xb1 2. ♕h1#
7) 1. f8♘ ♔h5 2. ♖xh3#
8) 1. ♕h8 ♔c3 2. ♖e2#
9) 1. ♘b4 ♔a5 2. ♕c5#
10) 1. f3 ♔e6 2. ♘f4#
11) 1. ♖b1+ ♔c2 2. ♗e4#
12) 1. ♗a2 ♔b4 2. ♖c4#

51: Route planner: Mate B

1) 1. ♔c2 ♔c4 2. ♖b6#
2) 1. ♖d4 ♔g5 2. ♕g6#
3) 1. c8♘ ♔a8 2. ♗c6#
4) 1. ♘f5 d5 2. ♕e2#
5) 1. ♔b2 ♔a4 2. ♕a3#
6) 1. ♖g7 ♔h2 2. ♖h7#
7) 1. ♗c5 ♔d5 2. ♕f5#
8) 1. f4 ♔d4 2. ♕b6#
9) 1. ♔g2 ♔e1 2. ♕f1#
10) 1. ♕e2 ♔h3 2. ♕f3#
11) 1. ♔f4 ♔e1 2. ♕e2#

12) 1. c8♘ ♔xd8 2. ♖f8#

52: Preventing loss of material A

1) 1. ... ♕xf5 2. f3 ♘g3 (2. ... ♕c5+? 3. ♗e3) (defending through protecting)
2) 1. ... ♘xh6 2. ♖g6 ♗e3 (2. ... ♘f5? 3. ♖e6#) (defending through protecting)
3) 1. ... ♘e6 2. ♗h3 (threatens ♗xe6) 2. ... ♗g1 (defending through moving away)
4) 1. ... ♘xb3 2. ♗c4 ♘c5 (defending through moving away and protecting)
5) 1. f3 f5 2. ♗d6+ (2. ♘d6 f4+) (defending through clearing a square and an intermediate move)
6) 1. f3 f5 2. ♘g5 (2. ♘d6 f4+ 3. ♔c1 fxg3) (defending through counterattack)
7) 1. ♖hd1 b6 2. ♗e7 (defending through moving away; 2. ... ♖xe7 3. ♖xd8+)
8) 1. ♕c5 ♗f8 2. ♗xc6 bxc6 3. ♕xe5+ (eliminating the defence)
9) 1. ♖xd5 ♕h4 (The square h4 is a safe square because of 2. gxh4 ♘xh4+)
10) Drawing
11) 1. ♘a3 c4 2. bxc4 (defending through protecting; clearing a square)
12) 1. ♘hg3 f5 2. ♔f2 (defending through protecting; there was a threat of 2. ... f4)

53: Preventing loss of material B

1) 1. ♖d5 ♕e6 2. ♖d3 (defending through moving away; to a safe square, because the e-pawn is pinned)
2) 1. ♖d1 b5 2. ♗d7 ♖c7 2. ♘b6 (eliminating the defence and moving away)
3) 1. ♘e5 ♗d6 (1. ... ♗d8 2. ♘xd3 ♗xc7+ 3. e5) (pin the attacker and exchange)
4) 1. ... ♖b3 2. Th8+ (2. ♕xf6 ♖b1#) 2. ... ♕xh8 (2. ... ♔xh8 3. ♕xf6+) 3. ♕xh8+ ♔xh8 4. cxb3 (defending through counterattack)
5) 1. ... ♖a8 2. ♗a6 ♗b7 3. ♖xa8 (3. ♗xb7 ♖xe8) 3. ... ♗xa8 (defending through moving away and protecting)
6) 1. ... ♗a5 2. ♘b3 d5 (prevent eliminating the defence; threat 3. ♗xc6)
7) 1. ♔g5 ♖f1 2. ♖dd1 (defending through protecting)
8) 1. ♗xb2 ♗xa4 2. ♘d4 (indirect protection because) 1. ... ♔xa5 (2. ... ♗d1 3. ♔b6) 3. ♗c3#
9) 1. ♘h3 (1. g4? ♘h4) 1. ... ♘h4 2. ♔d2 ♘xg2 (2. ... ♘f5 3. g4) 3. ♗e2#
10) 1. fxg4 ♖f7 (defending through protecting, otherwise the discovered attack 2. ♘f6+)
11) 1. ... ♖xc2 2. ♘e2 (2. ♖xc2? ♕xc2+ 3. ♔a1 ♕xd1+) (defending through protecting thanks to the pin on the c-file)
12) 1. ... ♘xh3 2. ♖d5 (2. ♔xh3? ♕h5+ 3. ♔g2 ♕xd1) 2. ... ♕c4 3. ♔xh3 (defending by first eliminating the double attack on h5)

54: Test: Mix C

1) 1. ♔b6 ♗xa2 2. ♗d2+ ♔c4 3. g8♕+ (passed pawn)
2) 1. ♔a4 ♗xa3 2. ♘b4 (transition to a won pawn endgame)
3) 1. b7 ♖xb7 2. ♔xb7 (avoiding stalemate)
4) 1. ♘f6 ♕d8 2. ♕xh6+ ♖xh6 3. ♗xh6# (mate in two)
5) 1. ... ♗b4 2. ♔c2 d4 (2. ... ♗xc3? 3. bxc3) 3. ♘e4 ♘xb5 (eliminating the defence: chasing away+material)
6) 1. ♖d7+ ♖5f7 2. ♗h5 ♖xd7 3. ♖xd7+(double attack)
7) 1. ... ♘xf6 2. ♗xc4 ♘d5+ (2. ... ♘e4+ 3. dxe4) (discovered attack)
8) 1. ♕xe4 ♖e6 2. ♖d8+ ♖xd8 3. ♕xe6 (capture an unprotected piece is correct thanks to a counter-attack)
9) 1. ♘xd6 ♖xd5 2. ♘e8+ (eliminating the defence: luring away+material)
10) 1. ♕xc5 ♕c4 2. ♕c7 (creating a passed pawn)
11) 1. ♘e5 ♘xd4 2. ♕d1 (2. cxd4 ♕xc1) (pin)
12) 1. ♕xg5 h6 2. ♕h4 (2. ♕g6 ♘f4+) (2. ♕g4 ♘e3+) (2. ♕h5 ♘f4+) (defending against a threat)

55: Test: Mix D

1) 1. ♖e2 b5 2. ♕f3
2) 1. f7+ ♔h8 2. ♖c8 ♖b8 (2. ... ♖xc8 3. f8♕+) 3. ♖xb8 ♖xb8 (defending against a loss of material)
3) 1. ... ♖ee8 2. ♗d6+ ♔g8 (2. ... ♘e7 3. ♖h8#) 3. ♗h7+ ♔h8 (getting out of check)

4) 1. ♘b3 ♕d1 2. ♕f5 (2. ♕e4 ♕h5) (pin)
5) 1. ♖c8+ ♖f8 2. ♖f1 (2. b8♕? ♕xb8)1. ... ♖xc8 (2... ♕xb7 3. ♖fxf8#) 3. bxc8♕# (mate in two)
6) 1. ♕a4+ ♘c6 2. 0-0-0) (2. ♖d1 ♗xc3+ (pin)
7) 1. ♖g1 ♕b2 2. ♕c6 ♖xe7 3. ♕a8+ (passed pawn)
8) 1. ♖h5 ♕xg4 2. ♖g5 (double attack with two pieces)
9) 1. ♘c5 ♕b5 2. ♘a6+ (2. ♘e6 ♖c2 or 2. ... ♖e7) (double attack: knight)

Route planner
(4-2) (4-3)

♗a7-**b6-a5**-c3	♘b5-**d4-c2**-e1
♗a7-**e3-d2**-c3	♘f6-**h7-g5**-f3
♗a7-**b8-d6**-b4	♘c3-**d5-f6**-g8
♗d7-**e8-g6**-b1	♘g1-**e2-f4**-h5
♗d7-**e6-a2**-b1	♘e4-**g5-f7**-d8
♗f3-**e2-c4**-f7	♘b4-**d3-f2**-h3

56: Test: Mix E
1) 1. ♘h4 ♗xf5 2. ♕f3 (2. ♕f2? ♗xc2+ 3. ♔xc2 ♕xf2) (2. ♕f1 ♗xc2+ 3. ♔xc2 ♕xf1) (pin)
2) 1. ♕xg7+ ♔h4 2. ♕c7 (creating a passed pawn)
3) 1. b8♕ ♘c3+ 2. ♔a1 (2. ♔a3 ♗e7+) (getting out of check: preventing mate)
4) 1. ♗b3 ♕xh1 2. ♕h4 (2. ♕c4 ♕a8; 2. ♕a7 ♕c6) (double attack: queen)
5) 1. ♕xb5 ♖xa2 2. ♕d5 (2. ♕c4? ♖c2) (double attack: queen)
6) 1. ♕xh7 ♖h8 2. f4 (defending against a loss of material)
7) 1. ♗h6+ ♔g8 2. ♖g6+ (oder 2. ♘e7+ ♘xe7 3. ♗xf7#) 2. ... fxg6 (2. ... hxg6 3. ♘f6#) 3. ♘f6# or 3. ♘e7# (mate by access and square clearance)
8) 1. ... ♖fe8 2. ♕c3 ♔f8 (2. ... e5 3. ♖xe5 ♖xe5 4. ♕xe5) (defending against mate by moving away)
9) 1. ♕xh6+ ♔g8 2. f4 ♖xg4 3. fxe5 (eliminating the defence: chasing away+mate)
10) 1. cxd4 ♗xd4+ 2. ♘e3 (getting out of check: preventing loss of material)
11) 1. ♖xd7+ ♔c6 2. ♖d5 (2. ♖xe7? ♗c5+) 2. ... ♔xd5; 2. ... a5+ 3. ♔c4; 2. ... ♗c5+ 3. ♔c4) 3. ♗g2# (defending against a loss of material)
12) 1. ♘g6 ♖d8 2. ♕xc8+ (2. ♕f4+ ♔a8 3. ♘xe7 ♖xd1+ 4. ♕c1 ♖xc1+ 5. ♔xc1 ♔b8) 2. ... ♔xc8 (2. ... ♖xc8 3. ♘xe7) 3. ♘xe7+ (intermediate move)