

Chess-2 Logic Puzzle – Solution

1. e8 is empty.

We are told that either the 4-row or the e-column is empty. Either way

2. e4 is empty

We are told that a4 is a rook with 13 possible moves. Firstly, as the 4-row is not empty

3. e5, e6, e7 are empty.

Now on an open board a rook has 14 moves, and given the constraints of the problem it must be Ra8 which is not possible, either because there is a piece of the opposite colour on a7 or one of the same colour on a8. The rook must be otherwise unimpeded, so that

4. b4, c4, d4, a5, a6 are empty

The clue at a5 tells us that there are 2 white pieces on a4/b5/b6. If the rook on a4 were black the b-column would have 2 white pieces. This would mean the b-column would have at least as many white as black pieces, in contradiction to the clue on d4. So

5. a4 is a WR

The clue on e7 requires there are to be at least two black pieces in the a-column. Thus a7 and a8 are both black.

Now we are told both kings are on the 8-row (clue e5) and that the square e7 is not attacked (clue c4) which rules out d8 and e8 for either king. The kings cannot be adjacent and so they must be on a8 and c8, but a8 is black, so

6. a8 is a BK, c8 is a WK





Clue b4 informs us there is a piece on b8 which is not a knight. It cannot be a pawn as it is on the 8th row. A rook or queen would give check in contradiction to clue e5. By elimination, it must be a bishop. The clue on a5 requires either b5 or b6 is white, and there cannot be another white piece in the b-column by clue d4. Thus

7. b8 is a BB

As b8 is a black piece, from clue e6

8. d5 is empty.

The board currently looks like

				E
				E
E				E
E			E	E
	E	E	E	E

We also know there is a black piece on a7, a white piece on b5 or b6. And another black piece on the b-column. This accounts for all 7 pieces (clue d5). It follows that the remaining squares are empty, so

9. d6,d7,d8,c5,c7 are all empty

We know (clue a6) that there is a piece on b7 which is not a knight. A bishop or queen would give check (clue e5) and a rook would attack e7 (clue c4). We also know it must be black, so

10. b7 is a BP

Clue c7 tells us black has two pawn moves, yet one of b6 and b5 is a white piece, so that black cannot play Pb5. It follows the remaining black piece on a7 must be a BP

11. a7 is a BP

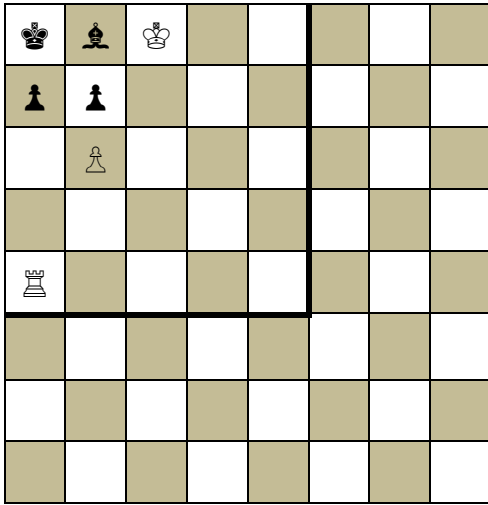
The moves Pa6 and Pa5 are possible, so the BP on b7 must be blocked by a white piece on b6. (Note the pawn on a7 could not capture on b6 as it would expose the BK to a check from the WR). So

12. b5 is empty

Clue c5 informs us one white piece has only one move. The king could move to d8 or d7, and the rook has 13 moves. It follows the piece on b6 has only one move. It has to be a pawn, so that

13. b6 is a WP

The position is at last known. It is:



White mates in 2 by 1 ♖a6! Any bishop move allows 2 ♖xa7 mate, whereas capturing the ♖ with the pawn allows 2 ♗b7 mate.

14. c6 is Ra6

Well done! This position is based on a published problem – I shall find the reference in due course.