

## King & Pawn Logic Puzzle – Solution

**1. a8, b8, c8, a3, b3, c3 are E.**

We are told that there are 5 pieces in total, kings and pawns, and white is a pawn up. So the pieces are WK, BK, WP, WP, BP.

No pieces can be taken, but Black to move would have two pawn moves. It follows the BP is on its original square, either a7, b7 or c7. The WPs cannot be captured immediately, but we are told that they will both be captured in 3 moves.

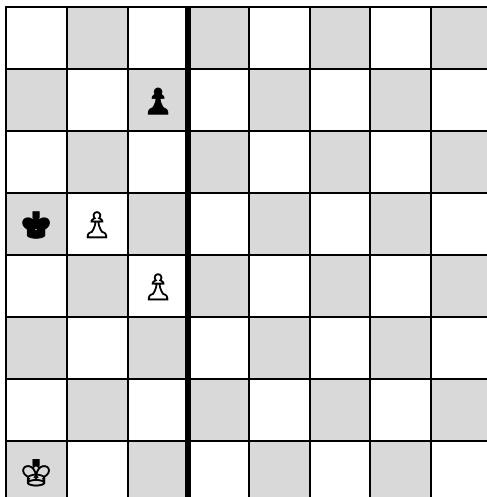
The WK has only 3 legal moves, yet it is not impeded by the BK which is 4 squares away. The WK cannot be near the BP or it could move towards it, nor can it be near the WPs or it could defend them against capture. The only possibility is the WK is in a corner on a1. The Black king is then on a5

**2. a1 is WK, a5 is BK.**

If there were a pawn on b3 or c2, the WK could attack or defend it. It follows the other 4 pieces are a knight's move from each other. The BK only has 3 legal moves, which means two of a6, b6, b5, b4, a4 are attacked by WPs. But White pawns on the 3<sup>rd</sup> row could be defended by the WK. The only configurations are WP c4, c5 BP b7, or WP b5, c4, BP c7. In the first of these, White would have only two pawn moves. Thus

**3. b5 is WP, c4 is WP, c7 is BP**

and the position is

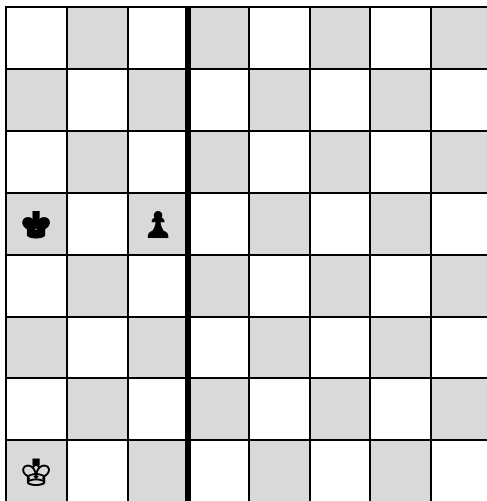


In a few moves, both White's pawns will be captured. His only hope is to arrange to have the "opposition" once this happens. For example, if 1 Kb2 Kb4; 2 Pb6 Pxb6; 3 Pc5 Pxc5; Black wins. If White tries 1 Ka2 Kb4; 2 Pb6 Pxb6; 3 c5 Kxc5! 4 Ka3 Kc4 wins (in fact 1..Ka4 also wins) Or 1 Kb1 Kb4 2 b6 cxb6 3 c5 Kxc5; 4 Kc1 Kb4; 5 Kb2 b5 wins. White must give up his pawns before Black has the option of taking on c5 with his King, forcing the BP to advance.

**1 b6! Pxb6** (if 1...Kxb6 then 2 Kb2 and 3 Kc3 defending the pawn is an easy draw.)

**2 c5! Pxc5**

leaving the position:



**3 Kb1!** Prepared to take the opposition whenever the black reaches the 4<sup>th</sup> row; if now 3..Kb4 4 Kb2! etc.

**3...Kb5**

**4 Kc1!** Again the only move

**4... Kb4**

**5 Kb2 Kc4**

**6 Kc2** is a draw.

So

**4. b6 is 1Pb6, c5 is 2Pc5, b1 is 3Kb1, c1 is 4Kc1, b2 is 5Kb2, c2 is 6Kc2**

Inserting X in the last few squares completes the puzzle. Please do leave comments!