



# THE PUZZLING SIDE OF CHESS

Jeff Coakley

## SWITCHEROOS: MAKE THE SWITCH TODAY

number 23

January 19, 2013

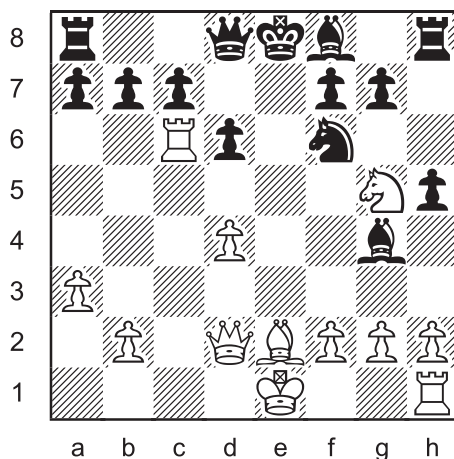
*Switcheroos* are a fun and sometimes challenging puzzle. The goal is to put the black king in checkmate by switching the position of two pieces. No actual chess moves are made. The pieces simply swap squares.

Any two pieces can switch places. Colours do not matter. You can trade white with white, black with black, or white with black. Switching the black king is a common trick.

*The position after the switch must be legal.* A position is legal if it could occur in an actual game. This rule implies several things.

- a) A pawn cannot be put on the 1st or 8th rank.
- b) Both kings cannot be in check.
- c) There must be a way to reach the resulting position with a legal white move. Impossible checks, especially double checks, are a frequent "violation".
- d) In some cases, *retrograde analysis* may be required to decide if the position after a switch is legal.

### Switcheroo 18

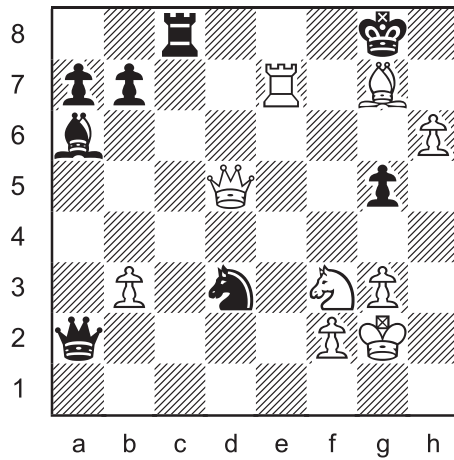


Switch two pieces so that Black is in checkmate.

For problems 1-17 and more information on switcheroos, see columns 4, 10, and 16 in the archives.

In many switcheroos, including the next one, the black king is already in check. That doesn't necessarily make the puzzle easier to solve.

### Switcheroo 19

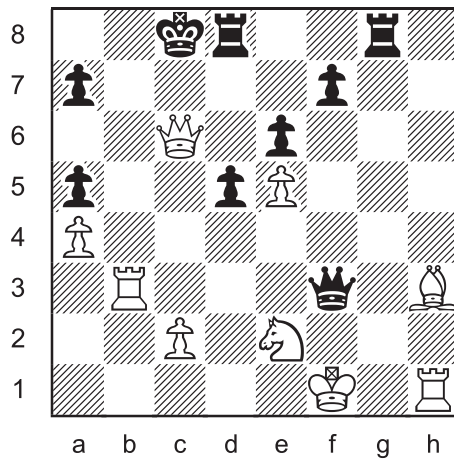


Switch two pieces so that  
Black is in checkmate.



The following position could be used as a "Who's the Goof?" puzzle, where the task is to figure out why the position is illegal. See column 12. Of course, all legal matters will be resolved with the correct switch.

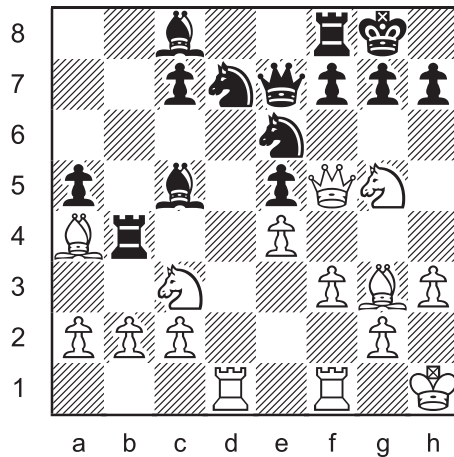
## Switcheroo 20



Switch two pieces so that  
Black is in checkmate.

Our fourth and final problem is trickier than it looks. The obvious switch is not the answer. You may want to consult a chess lawyer to discuss the legal issues in this position.

## Switcheroo 21



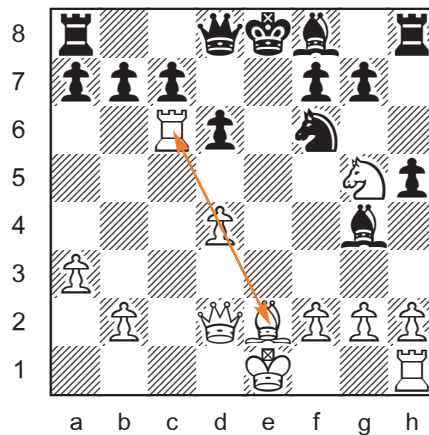
Switch two pieces so that  
Black is in checkmate.

## SOLUTIONS

All switcheroos by J. Coakley. Problems 1 is from *Winning Chess Puzzles For Kids* (2006), 2 and 3 from *Volume 2* (2010). Problem 4 is a *ChessCafe.com* original (2013).

*PDF hyperlinks.* You can advance to the solution of any puzzle by clicking on the underlined title above the diagram. To return to the puzzle, click on the title above the solution diagram.

### Switcheroo 18

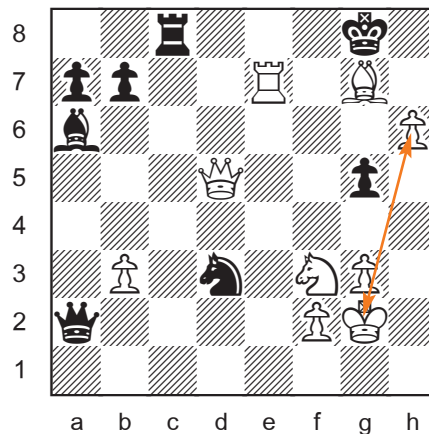


Rc6↔Be2

A terminal double check. In the position after the switch, the last move was Be4-c6#.

(Qd2↔f7? puts both kings in check.)

### Switcheroo 19

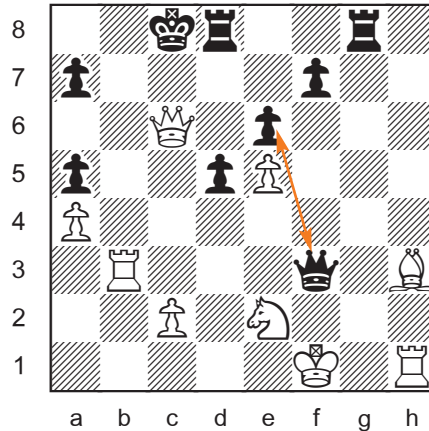


Kg2↔h6

The white king uncharacteristically joins the mating forces.

(Qd5↔Bg7? is an impossible double check.)

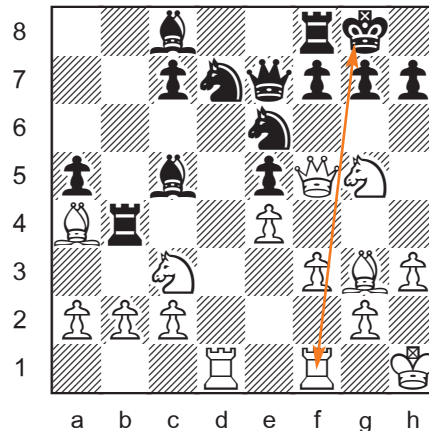
## Switcheroo 20



e6↔Qf3

In the diagram, both kings are in check. So the switch must involve either the black queen or the white king. Switches of the white king leave him in check or put a pawn on the first rank. The only switch of the black queen that does not stop mate or give check is e6↔Qf3. On e6, the queen is pinned by the bishop on h3.

## Switcheroo 21



Rf1↔Kg8

This is the only switch that results in a legal mate. It would take a lot of cooperation to manoeuvre the black king to f1 and the white rook to g8, but it is possible.

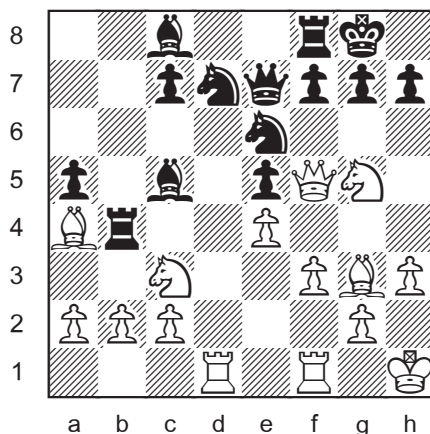
(Qf5↔h7? The position is illegal because of the black pawn on f5. The only way it could have reached f5 is by capturing twice from h7. But White is only missing one piece.)

(Ne6↔Kg8? is an impossible double check.)

(Nd7↔Kg8? is an impossible double check.)

(Ba4↔Kg8? is illegal because a white bishop could never reach g8 with unmoved black pawns on f7, g7, h7.)

(Ng5↔Kg8? is a secondary trap. Did it catch anyone? The position is illegal because there is no legal move on the previous turn. The white queen could only have moved from f4, f6, g4, or g6. On those squares, she would already be checking the black king on g5. *It cannot be White's turn if Black is in check.*)



It is possible to modify this puzzle so that each of the above “tries” is the correct solution. All changes listed below are from the diagrammed position.

### Switcheroo 21b

Place the white f-pawn on f2 instead of f3.

Ng5↔Kg8

The last move was Qf3-f5#.

(Rf1↔Kg8? is illegal because the black king could never reach f1 with unmoved white pawns on b2, c2, f2, g2.)

### Switcheroo 21c

Place a white rook on e1 instead of f1,  
and the white bishop on b5 instead of a4.

Nd7↔Kg8

The last move was Bd3-b5#.

(Re1↔Kg8? is an impossible double check.)

[Corrected from the original column which left the rook on f1, allowing the switch Rf1↔Kg8 with last move 1.Rd3-d1#. Thanks to Yan Lim of Singapore for pointing this out.]

### **Switcheroo 21d**

Place a white knight on g3 and a white bishop on g5.

Ne6↔Kg8

(Rd1↔Kg8? is an impossible double check.)

### **Switcheroo 21e**

Place a white rook on e1 instead of f1,  
and a black pawn on h6 instead of h7.

Ba4↔Kg8

(Re1↔Kg8? is an impossible double check.)

### **Switcheroo 21f**

Place a white rook on e1 instead of f1,  
and remove the white pawn from c2.

Qf5↔h7

This switch is now legal because White is missing two pieces, which would allow a black pawn to capture twice from h7 to f5.

Until next time!

© Jeff Coakley 2013. Illustrations by Antoine Duff. All rights reserved.