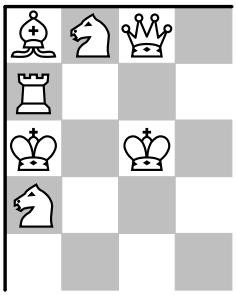
Alain Brobecker's

Coloring problems & retro-rebuses

Coloring problems

My interest in chess problems began around 2003, when a friend gave me his collection of Europe Échecs. The July 1998 issue featured problem **(1)**, which was proposed at the 1998 French Retro Solving Championship *(CFS: Championnat de France de Solution)*. The monochromacy of the position instantly attracted me.

(1) Pascal Wassong
CFS Rétro 1998



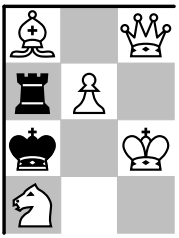
?+?=7: Color the pieces.

The stipulation asks us to find the colors of the pieces so that the position could have arisen from a legal game of chess, however improbable that game might be. To do this we will have to study the game's past leading to the given position, thus coloring problems are a subset of retrograde analysis problems.

After reproducing the position, I took a yellow highlighter (for the white pieces) and a pencil (for the black ones) and began my journey toward the solution. Here's a detailed solution that hopefully will help if you want to solve coloring problems:

(1) Queen c8 and kNight b8 are attacking both Kings, so they have the same color and a discovered check by promotion must have just happened, hence ♘b8 and ♕c8. We have two options:

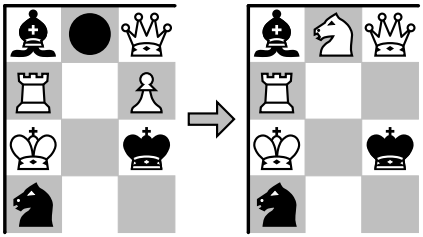
• Let us suppose the last single move was ♙b7-b8=♘++. We also have ♔c6, ♗a8 and ♘a6 otherwise there would have been an illegal check before that move. And then we deduce ♚a6 and ♜a7. The position just before the promotion was:



But... but... What was black's last

single move? Check carefully, none is possible! Retro-analysts say that black is **retro-stalemate** and this is contradictory, thus our hypothesis is wrong, last single move was not ♙b7-b8=♘++.

• Let us suppose the last single move was ♙c7×?b8=♘++. We also have ♔a6, ♖a7, ♗a8 and ♞a6 otherwise there would have been an illegal check before that move. We had:



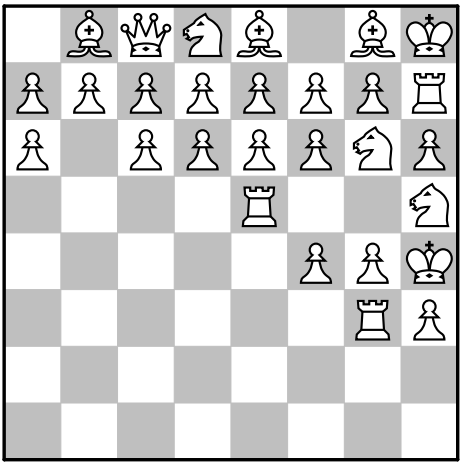
And that's the solution, since this time there's no difficulty retracting moves for black.

While the solution might seem long, problems of this kind are not difficult to solve once you get used to the logic behind them. You will see that I have made a lot of such simple problems that I hope you will enjoy solving.

Before moving on to the next subject, it might be a good idea to present a more difficult coloring problem with its solution, in order to show more solving methods.

Problem **(2)** was made by Andriy Kornilov & Andriy Frolkin who are respectively Fide Master and International Master for chess composition.

(2) Andriy Frolkin
& Andriy Kornilov
Europe Échecs july 1988



?+?=28: Color the pieces. Mate? In what order did the captures occur?

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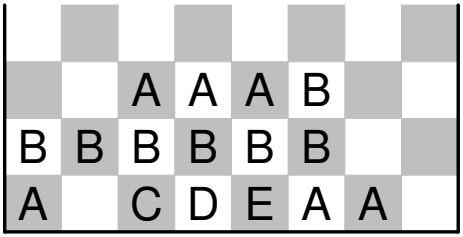
Retro-rebuses

Problem **(3)** is the first published retro-rebus. It can be considered as an extension of coloring problems, but this time we also don't know the type of piece.

(3) Andriy Frolkin
& Andriy Kornilov
Rex Multiplex 1983



?+?=16: Assign a specific piece to each letter. **(3b)** Ag1→Ab1

(3):

• C and E are the kings.

• D is neither a queen nor a rook, otherwise Dd1 would give an illegal check to the opposite king.

• B can represent neither queens nor bishops, otherwise Bd2 would give an illegal check to the opposite king.

B cannot represent rooks, otherwise either Bc2 or Be2 would give an illegal check to the opposite king.

B cannot represent knights, otherwise either Ba1+Be1 or Bc2+Bf3 would give an illegal double check to the opposite king.

B cannot represent black pawns, otherwise either Bb2+Bd2 or Bd2+Bf2 would give an illegal double check to the opposite king.

Therefore, B represents the white pawns.

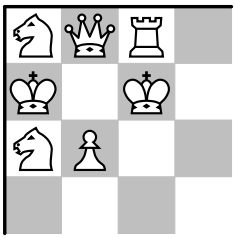
• therefore cannot be a bishop, so it must be a knight.

• There are 4 or 5 promoted A's, so they must be black pieces.

If A represented black queens, there would be 5 promoted black pawns, which implies 1+2+3=6 captures of white pieces in order for the black pawns on d, e, and f to promote. In addition, the white bishop c1 must have been captured on its original square, there must have been a capture by the black pawn g2×?f1=Q+ as the last move, and one additional capture (either black or white) is needed for the white h-pawn to let the black h-pawn pass.

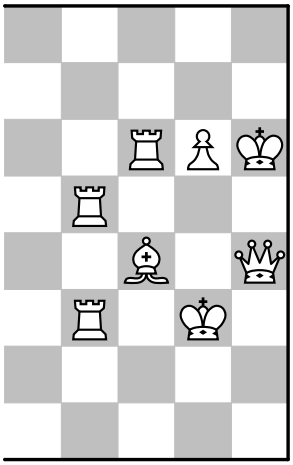
Orthodox problems

(4) Alain Brobecker
2005/01/23, diagrammes n°155



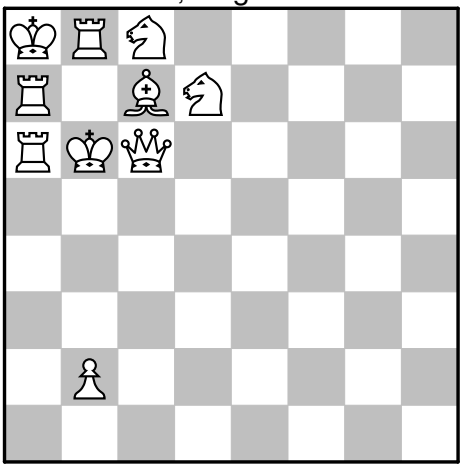
?+?=7: Color the pieces. Player to move mates in 2 moves.

(5) Alain Brobecker
CFS Rétro 2005



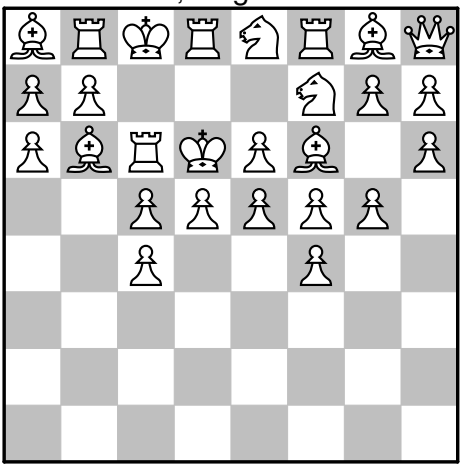
?+?=8: Color the pieces. Last 2 single moves?

(6) Alain Brobecker
2005/04/17, diagrammes n°156



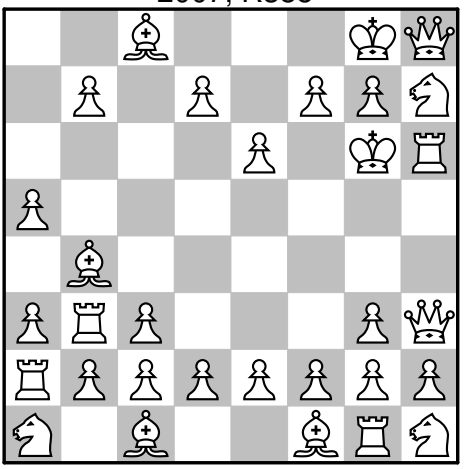
?+?=10: Color the pieces.

(7) Alain Brobecker (d'après Gidéon Husserl)
2005/06/02, diagrammes n°156



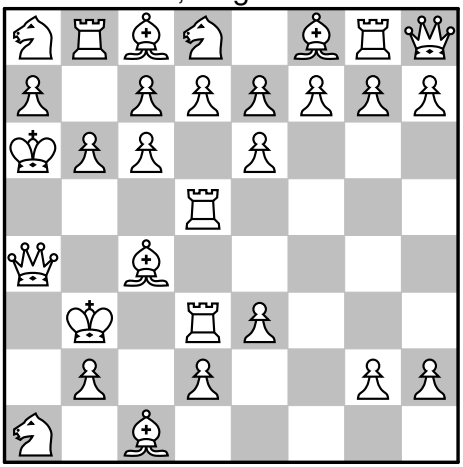
?+?=27: Colorier les pièces. 2 derniers demi-coups?
Color the pieces. Last 2 single moves?

(8) Alain Brobecker & Cedric Lytton
The Problemist vol.21 n°3, may 2007, R385



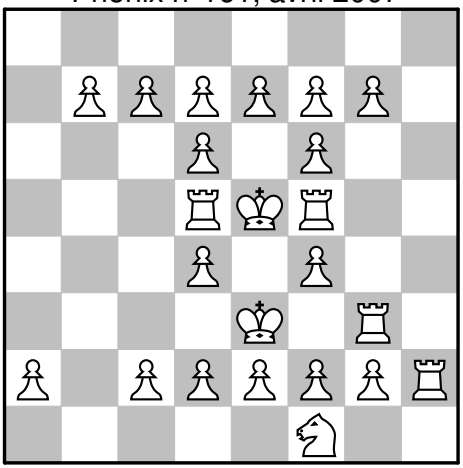
?+?=31: Colorier les pièces.
Color the pieces.

(9) Alain Brobecker
2006/11/22, diagrammes n°160



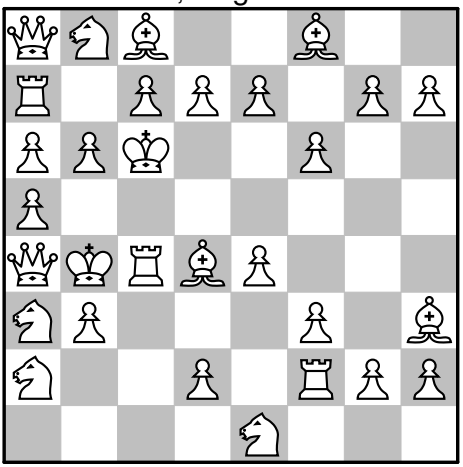
?+?=30: Colorier les pièces. 4 derniers demi-coups?
Color the pieces. Last 4 single moves?

(10) Alain Brobecker
Phénix n°161, avril 2007



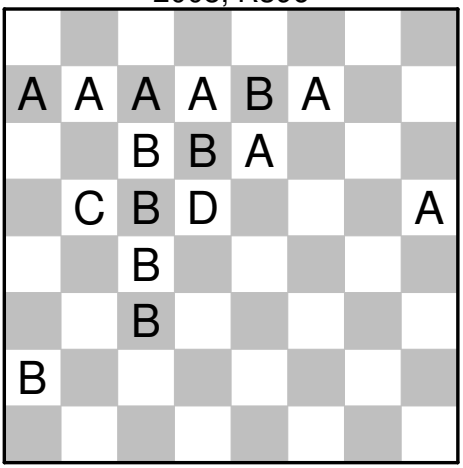
?+?=23: Color the pieces.

(11) Alain Brobecker
2007/03/04, diagrammes n°160



?+?=30: Colorier les pièces. 6 derniers demi-coups?
Color the pieces. Last 6 single moves?

(12) Alain Brobecker, 2007/09
The Problemist vol. 21 n° 8, march 2008, R396

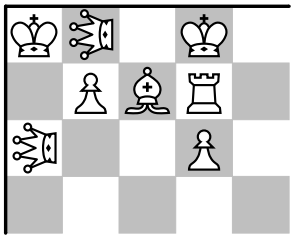


?+?=16: Different letters represent units different in type and/or colour. Recover the position.

Original stipulation was: Recover the position. Different (identical) letters represent pieces different (identical) in type or (and) colour.
Retrouver la position. Des lettres différentes (identiques) représentent des pièces de nature ou (et) de couleur différentes (identiques).

Fairy problems

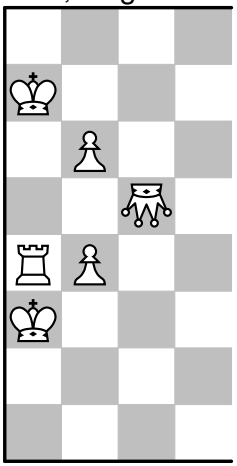
(13) Alain Brobecker
2005/05/15, Messigny 2005
Special Honorable Mention



?+?=8: Color the pieces. **Spiders at a6 and b8**.

Araignée: se déplace comme un roi ainsi que sur le "carré vidé" sur lequel elle se trouve (voir diagramme). Elle ne peut pas sauter par dessus une autre pièce.

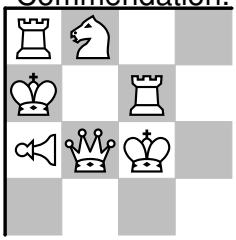
(14) Alain Brobecker
2006/04/09, diagrammes nº157



?+?=6: Color the pieces. Last 2 single moves? **Grasshopper at c5**.

Sauterelle: se déplace sur les lignes de la Dame, en sautant par dessus une pièce de couleur quelconque, sa case d'arrivée étant la case qui suit immédiatement le sautoir, à condition que cette case soit libre ou occupée par une pièce adverse que la Sauterelle capture alors.

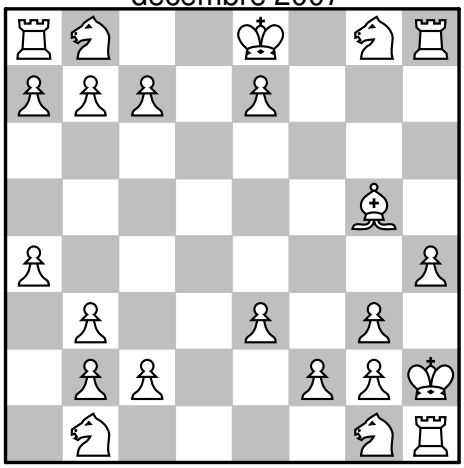
(15) Alain Brobecker
2007/05, RIFACE 2007 (Messigny)
Commendation.



?+?=7: Color the pieces. **Doped pawns**.

Doped pawns can promote when they move, whatever the rank they are on.

(16) AB & Thierry Le Gleuher
2007/12,5540 Phénix 168,
décembre 2007

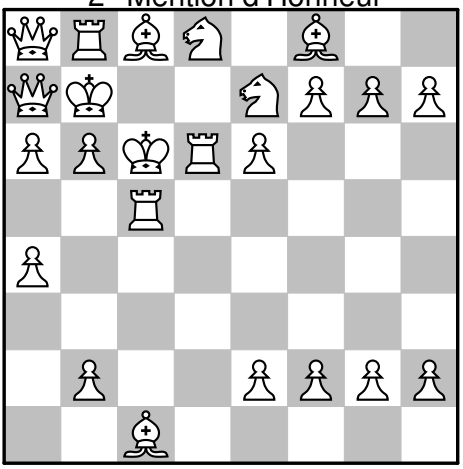


?+?=23: Color the pieces. Last 2 single moves? **Monochromatic chess**.

Échecs Monochromatiques: Les cases de départ et d'arrivée de chaque coup doivent être de même couleur.
In monochromatic chess:

- kNights cannot move
- only the kingside castling is possible
- a promotion requires 4 or 6 captures
- Rooks can only reach 1/4th of the squares, not half of them
- the en passant capture is the only way to capture a piece of other color

(17) Alain Brobecker
Mémorial Jean-Michel Trillon 2012
(Phénix 223)
2º Mention d'Honneur

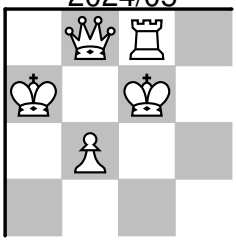


?+?=24: Color the pieces. **Bichromatic chess**.

Bichromatic chess: The start and end squares of every move must be of different colors.

Alain Brobecker

2024/05



5+0: Color the pieces to have a valid position
Reach chess

Reach Chess (Markus Niebisch, Cameron Browne, Ludii, 2024) is a simple chess variant played as per standard chess except that:
1. A player wins by reaching the far rank with any piece of their color.
2. A player cannot make any move which would leave their king in check.
3. A player with no legal moves must pass that turn.

sceptres
Carrera chess 408