



Seven Flipped

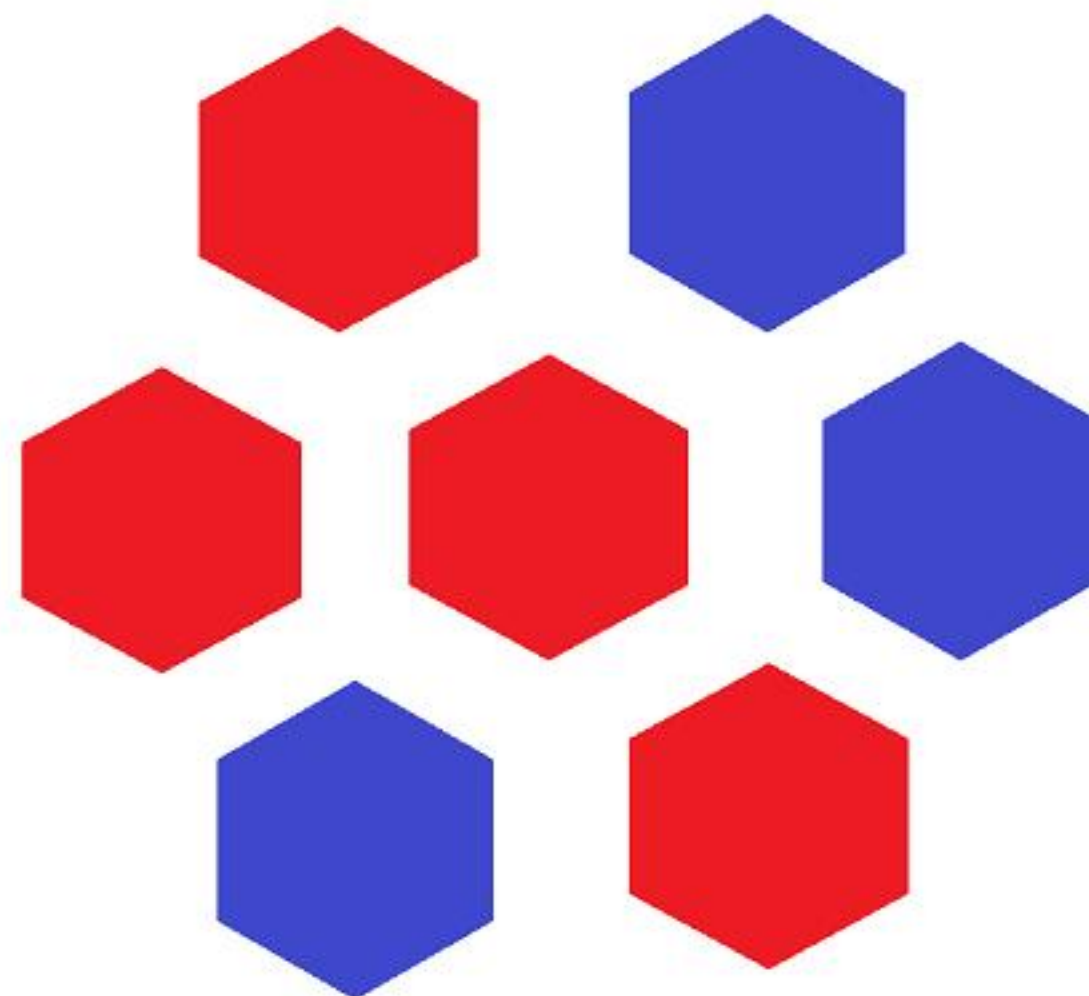
You have seven hexagonal-shaped mats – each with one side red and one blue. Starting red side up – these mats all have to be turned over, but you can only turn over exactly three at a time.

What is the smallest number of moves you can do this in?

Try with other numbers of mats.

Do you notice any patterns in your findings?

Can you explain why these patterns occur?



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<http://nrich.maths.org>