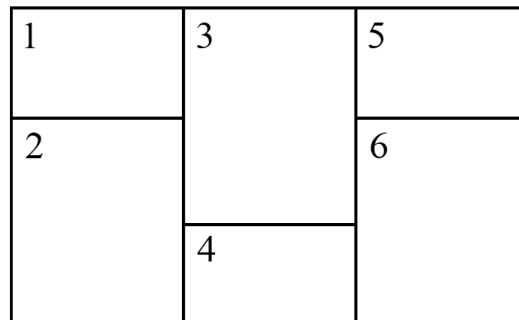# Problem of the Week
Problem C
Adding Some Colour 1

Martina and Zahra play a game where they take turns shading regions in the diagram shown.

1	3	5
2		6
	4	

On their turn, each player shades a region in the diagram that is not bordering another shaded region. After some number of turns, it won't be possible to shade any more regions, and the game will be over. The winner is the player who shaded the last region.

Suppose Martina is the first player to shade a region. Two of the six regions are such that if she shades one of them on her first turn, then she can guarantee that she wins the game, regardless of what Zahra does on her turns. Which two regions are they?