There are 5 piles of chips, and each pile has 5 chips. Each chip is either Blue or Red. If a pile has more blue chips than red chips, then blue wins that pile, and vice-versa.

In the example below, there are 15 total red chips, and 10 total blue chips. Red wins 4 of the 5 piles, and blue wins 1 pile:

Can you regroup these 25 chips so that blue wins more piles than red? (Remember, 15 of these chips are red, and 10 are blue.)
Can you still group the chips so that blue wins more piles than red if there are 16 red chips and 9 blue chips?

What if there are 17 red chips and 8 blue chips?

What is the smallest number of blue chips you need so that it's still possible to group the chips so blue wins more piles than red?
Beat the Odds

What is the smallest number of blue chips you need so that it's still possible to group the chips so blue wins more piles than red if there are 5 piles of chips with 7 chips each?

What if there are 7 piles with 5 chips each?
Beat the Odds

What if there are 7 piles with 7 chips each?