

Is This Fair?



Task Statement 1

1. Here are some games:
 - The Flipper flips 3 coins. If exactly 2 coins are the same, then the Flipper wins. Otherwise, the Challenger wins.
 - The Flipper flips 4 coins. If exactly 2 coins are the same, then the Flipper wins. Otherwise, the Challenger wins.

Are these games fair?

2. Design rules for a fair game of flipping 5 coins.
3. Design rules for a fair game of flipping 6 coins.
4. Design a fair game, using any objects you want—for example, coins, spinners, or number cubes. Explain how you know your game is fair.

Is This Fair?



Task Statement 2

1. Here are some games:
 - The Flipper flips 3 coins. If there are more heads than tails, then the Flipper wins. Otherwise, the Challenger wins.
 - The Flipper flips 4 coins. If exactly 2 coins are the same, then the Flipper wins. Otherwise, the Challenger wins.
 - a. One of the games is fair and the other is not. Which game is fair?
 - b. For the game that isn't fair, change the rules to make it fair.
2. Design rules for a fair game of flipping 5 coins.
3. Design rules for a fair game that involves rolling 2 number cubes.