



## Problem of the Week

### Problem A

### Coins vs. Dice

You are playing the newest board game Ticket to Clue. The goal of the game is to collect as many tokens as possible. When you land on a Chancey square you must pay 1 token for an opportunity to win 3 tokens. This Chancey square gives you two choices.

Coin Option	Dice Option
Flip two identical coins. Record which faces land up.	Roll two six-sided dice. Find their sum.
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If the faces match, you WIN. If the faces don't match, you LOSE.	If the sum is 7 or greater, you WIN. If the sum is less than 7, you LOSE.

- A) Experiment with each option. Try flipping coins and rolling dice at least 20 times each. Based on your experiments, which option would you choose?
- B) Do you think the results of your experiments determined the best choice? Justify your answer.
- C) If the Dice Option was changed so you were required to pay 15 tokens with a chance to win 17 tokens, would that change which option you would pick? Explain your choice.

