Look at the graphs of the people in your group. Decide which graph is closest to theoretical probability. Explain why you chose that particular graph.

## 23.1

Fair events-events where the probability of the outcomes is even
Ex: rolling six-sided fair die
tossing a fair coin
spinning spinner with equal parts

Fair game-a game where all players have an equal chance of winning

## Is It a Fair Game?

The concept of a fair game implies that each player has an equal chance of winning the game. Tossing a coin is considered a fair game, since there is an equal chance that a head or a tail will come up. This doesn't guarantee that in tossing a coin 10 times, 5 times a head will appear and 5 times a tail.

## The Addition Game



If the answer is odd, player \#1 gets a point. If the answer is even, player \#2 gets a point. Roll the dice 36 times.

Predict whether or not you think this game is fair. Explain your prediction.

$$
\mathrm{P}(\text { odd })=\quad \mathrm{P}(\text { even })=
$$

