

Name: _____

Date: _____

Learning Goal 9.1

I can calculate probabilities.

Experimental Probability	Theoretical Probability	Simulation

Theoretical Probability Formula for Independent Events

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Examples

- What is the probability of flipping heads and rolling a 4?
- What is the probability of flipping tails and rolling an odd number?
- What is the probability of rolling a 6 twice in a row?
- What is the probability of rolling a 5 three times in a row?

Example LeBron plays basketball for the school team. His stats show he has an 75% chance of making his first foul shot and an 80% chance of making his second shot. What is the probability that LeBron will make both his shots?

- Create a simulation to find the experimental probability. Repeat the simulation 10 times and record your results.
- What is the experimental probability that he will make both shots?
- What is the theoretical probability that he will make both shots?

Trial	Experimental Results		
	First Shot	Second Shot	Both Good Shots
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

Example Andrew has a regular coin and a three coloured spinner. Andrew wants to calculate the probability that he will flip heads and spin blue. Model this situation and record the results for 10 trials.

Trial	Experimental Results		
	Flip Heads	Spin Blue	Both
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

- What is the experimental probability of this outcome?
- What is the theoretical probability of this outcome?