
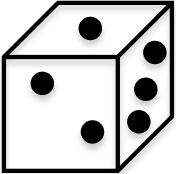
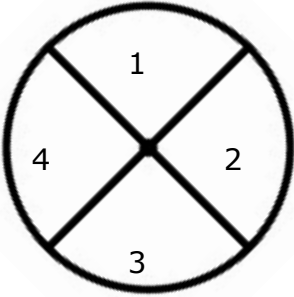


 **Theoretical and Experimental Probability**
Explain

Part 1: Compound Probability

Directions: Determine the probability of each situation.

Diagram	Find this...	Process	Probability
	<p>P(Green and Red) without replacement</p>		
	<p>P(rolling a 2 followed by rolling a 5)</p>		
	<p>P(spinning 4 followed by spinning 1)</p>		



Part 2: Selecting and Using Simulations

Directions: Different ways of using simulations are shown below. For the situations that follow, select a simulation that you could use to model the situation.

<p>Simulation 1: Color Tiles</p> <p>Place 4 red tiles and 4 green tiles in a bag. Draw tiles to represent outcomes.</p>	<p>Simulation 2: Number Cube</p> <p>Roll a 6-sided fair number cube. Use the number landing on the top face to represent the outcome.</p>	<p>Simulation 3: Random Number Generator</p> <p>Use a random number generator from a graphing calculator or online. The random number represents a particular outcome.</p>
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1. Mrs. Jefferson has 25 students in her math class. She wants to randomly select two students to answer questions from last night's homework. She assigns each student a number from 1 to 25. Which simulation should she use? Justify your answer.

2. Coach Esparza has 40 students in his P.E. class and wants to divide them into two teams. As students enter the gym, he wants to randomly select students for either Team A or Team B. Which simulation should he use? Justify your answer.

3. At a neighborhood meeting, there are six issues that need to be discussed. The moderator of the meeting wants to randomly assign each attendee to one discussion group. Which simulation should the moderator use? Justify your answer.

4. Select one of the three simulations to actually run. Do the actual results from the simulation match what you expected? Why or why not?

