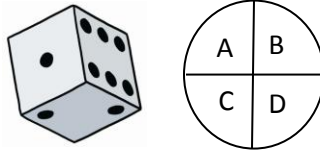


2nd semester exam Review 2014
Part 5
Probability

1. Juan will roll a fair number cube numbered 1 through 6 and spin a spinner. The number cube and spinner are shown.

What is the probability of rolling a 5 and spinning a C?

- A) $\frac{1}{24}$ B) $\frac{1}{10}$ C) $\frac{5}{12}$ D) $\frac{1}{20}$



2. Billy has a spinner that is divided into red, yellow, blue, and green sections. He spun the spinner 20 times and got the following results.

Color	Red	Yellow	Blue	Green
Number of Times	4	2	5	9

Based on his results, how many times can Billy expect the spinner to land on a blue section if he spins it 60 times?

- A) 5 times B) 15 times C) 25 times D) None

3. You roll a die 4 times. What is the probability of landing on an even number all 4 times?

- A) $\frac{4}{6}$ B) $\frac{1}{6}$ C) $\frac{1}{8}$ D) $\frac{1}{16}$

Identify the following situations (4 – 7) as independent, A, or dependent, B, events?

4) You roll a number cube and **if** you get a 5, you roll it again. _____

5) You toss a coin, then toss it again, and toss it again. _____

6) You pick a card, do not replace it, and draw another card. _____

7) You draw a red marble, replace it, and draw a yellow marble. _____

8) The Duggar family has 4 children, so far. How many possible combinations of boys and girls can there be in the family? Draw a tree diagram to show all the help you.

9) A coin is tossed 6 times. What is the probability of getting heads all 6 times?

10) Robert recorded the results to an experiment.

*The spinner landed on orange – 6 times,
purple – 9 times, silver – 3 times, and magenta – 7 times.*

According to the results, what would be the probability of spinning a purple, as a percentage?

11) Three number cubes are rolled. What is the probability that each cube shows a 5?

12) You have 25 marbles in a bag. Six are red, 5 are blue, 8 are green, and six are swirls. On the first draw you get a swirl marble. If it is not replaced, find the probability of getting a swirl, and then a blue?

13) In a deck of 52 cards, 26 are red and 26 are black. Find the probability the first card will be red and the second card is black if you do not replace the first card you draw.

14) A bag contains 8 red marbles, 8 blue marbles and 9 green marbles. If you do not replace the marbles after each draw, what is the probability of drawing a blue marble, then a green marble?

15) A spinner is divided into 4 sections; blue, green, red, and orange. Bob will spin the spinner twice. What is the probability of spinning red both times?

16) Andrew will roll a number cube three times. What is the probability that he will roll a number greater than 4 all three times?

17) Vito has the letters ALAMO written on 5 cards. He also has a number cube. What is the probability that he will choose a card with the letter A and then roll an odd number?

