13   Chapter 13 Mid-Chapter Test

(Lessons 13-1 through 13-3)

Part I   *Write the letter for the correct answer in the blank at the right of each question.*

1. Tossing a coin is an example of :

  A an outcome   **C** an event
  B a two-stage experiment   **D** a multi-stage experiment

1. _____

2. At Jeans R Us, pairs of jeans comes in 9 different brands, 5 different cuts, and 4 colors. How many different types of jeans are there?

  F 18   **G** 120   **H** 180   **J** 954

2. _____

3. For her graduation party, Lisa can invite 5 of her 15 classmates to go to a water park. What is the probability that, chosen at random, Jenny, Amy, Liza, Katy, and Emily are invited?

  A $\dfrac{1}{360,360}$ **B** $\dfrac{5}{360,360}$ **C** $\dfrac{5}{3003}$ **D** $\dfrac{1}{3003}$
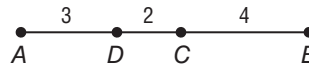
3. _____

4. Point X is chosen at random on $\overline{AB}$.
Find P (X is on $\overline{AD}$).

  F $\dfrac{1}{3}$ **H** $\dfrac{1}{2}$

  G $\dfrac{1}{9}$ **J** $\dfrac{1}{6}$
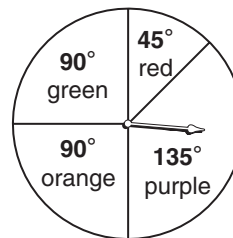
4. _____

5. Use the spinner at the right. Find the probability the pointer lands on purple.

  A 0.375   **C** 0.135

  B 0.25   **D** 0.10

5. _____

Part II

6. Mitchell is planning to travel to either Europe or South America either the summer after his junior year or after his senior year. Represent the sample space with an organized list.

6. _____

7. Draw a tree diagram to represent the sample space from the event in Question 6.

8. A teacher randomly assigns her 30 students 4-digit I.D. numbers using the digits 0 to 9. No digits are repeated within an ID number. What is the probability one of the ID numbers is 9876?

7. _____

9. Kayla and Bianca each bought one raffle ticket at the school fair. If 50 tickets were sold, what is the probability Kayla bought ticket number 7 and Bianca bought ticket number 10?

8. _____

10. If you randomly selected a permutation of the letters E, O, G, M, E, R, T, Y, what is the probability they would spell "geometry"?

9. _____

10. _____

Assessment