

**S.CP.A.3: Conditional Probability**

- 1 Sean's team has a baseball game tomorrow. He pitches 50% of the games. There is a 40% chance of rain during the game tomorrow. If the probability that it rains given that Sean pitches is 40%, it can be concluded that these two events are
  - 1) independent
  - 2) dependent
  - 3) mutually exclusive
  - 4) complements
  
- 2 A bag contains five green gumdrops and six red gumdrops. If Kim pulls a green gumdrop out of the bag and eats it, what is the probability that the next gumdrop she pulls out will be red?
  - 1)  $\frac{5}{11}$
  - 2)  $\frac{5}{10}$
  - 3)  $\frac{6}{11}$
  - 4)  $\frac{6}{10}$
  
- 3 Gabriella has 20 quarters, 15 dimes, 7 nickels, and 8 pennies in a jar. After taking 6 quarters out of the jar, what will be the probability of Gabriella randomly selecting a quarter from the coins left in the jar?
  - 1)  $\frac{14}{44}$
  - 2)  $\frac{30}{44}$
  - 3)  $\frac{14}{50}$
  - 4)  $\frac{20}{50}$
  
- 4 Some books are laid on a desk. Two are English, three are mathematics, one is French, and four are social studies. Theresa selects an English book and Isabelle then selects a social studies book. Both girls take their selections to the library to read. If Truman then selects a book at random, what is the probability that he selects an English book?

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**Answer Section**

1 ANS: 1

The probability of rain equals the probability of rain, given that Sean pitches.

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2 ANS: 4 REF: 011308ia

3 ANS: 1

$$\frac{20 - 6}{(20 - 6) + 15 + 7 + 8} = \frac{14}{44}$$

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4 ANS:

 $\frac{1}{8}$ . After the English and social studies books are taken, 8 books are left and 1 is an English book.

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