

Guided Practice Probability with "and" and "or" Date _____ Period _____

Events A and B are independent. Find the missing probability.

$$1) P(B) = \frac{11}{20} \quad P(A \text{ and } B) = \frac{121}{400} \quad P(A) = ?$$

$$2) P(A) = \frac{9}{20} \quad P(A \text{ and } B) = \frac{9}{80} \quad P(B) = ?$$

$$3) P(\text{not } A) = \frac{3}{5} \quad P(A \text{ and } B) = \frac{6}{25} \quad P(B) = ?$$

$$4) P(A) = \frac{7}{20} \quad P(A \text{ and } B) = \frac{21}{100} \quad P(B) = ?$$

$$5) P(B) = \frac{9}{20} \quad P(A \text{ and } B) = \frac{27}{80} \quad P(A) = ?$$

Find the probability.

- 6) A basket contains six apples and four peaches. You randomly select a piece of fruit and then return it to the basket. Then you randomly select another piece of fruit. Both pieces of fruit are apples.

- 7) You select a card from a standard shuffled deck of 52 cards. You return the card, shuffle, and then select another card. Both times the card is a diamond. (Note that 13 of the 52 cards are diamonds.)

- 8) A bag contains seven red marbles and four blue marbles. You randomly pick a marble and then pick a second marble without returning the marbles to the bag. The first marble is red and the second marble is blue.
- 9) You flip a coin twice. The first flip lands tails-up and the second flip also lands tails-up.
- 10) There are nine shirts in your closet, four blue and five green. You randomly select one to wear on Monday and then a different one on Tuesday. You wear a blue shirt on Monday and a green shirt on Tuesday.
- 11) There are twelve shirts in your closet, six blue and six green. Five of the blue shirts and four of the green shirts fit well. The others are too big. You randomly select a shirt to wear. It is green or is too big.
- 12) A cooler contains eleven sports drinks: five lemon-lime and six orange. One of the lemon-lime and four of the orange drinks are cold. The others are still warm. You randomly grab a bottle. It is lemon-lime flavored or cold.
- 13) A box of chocolates contains five milk chocolates and five dark chocolates. Four of the milk chocolates and four of the dark chocolates have peanuts inside. You randomly select and eat a chocolate. It is a milk chocolate or has no peanuts inside.
- 14) A bag contains four yellow tennis balls numbered one to four. The bag also contains three green tennis balls numbered one to three. You randomly pick a tennis ball. It is green or has a number greater than three.
- 15) A basket contains five apples and five peaches. One of the apples and four of the peaches are rotten. You randomly pick a piece of fruit. It is rotten or it is an apple.

Answers to Guided Practice Probability with "and" and "or" (ID: 1)

$$1) \frac{11}{20}$$

$$2) \frac{1}{4}$$

$$3) \frac{3}{5}$$

$$4) \frac{3}{5}$$

$$5) \frac{3}{4}$$

$$6) \frac{9}{25} = 0.36$$

$$7) \frac{1}{16} \approx 0.063$$

$$8) \frac{14}{55} \approx 0.255$$

$$9) \frac{1}{4} = 0.25$$

$$10) \frac{5}{18} \approx 0.278$$

$$11) \frac{7}{12} \approx 0.583$$

$$12) \frac{9}{11} \approx 0.818$$

$$13) \frac{3}{5} = 0.6$$

$$14) \frac{4}{7} \approx 0.571$$

$$15) \frac{9}{10} = 0.9$$