

Assignment

Date _____ Period _____

Find the probability.

- 1) A bag contains eight red marbles and six blue marbles. You randomly pick a marble and then pick a second marble without returning the marbles to the bag. Both marbles are red.
- A) $\frac{64}{169} \approx 0.379$ B) $\frac{4}{13} \approx 0.308$
 C) $\frac{1}{4} = 0.25$ D) $\frac{1}{9} \approx 0.111$
- 2) Your sock drawer has four white socks, two brown socks, and four black socks. You randomly pick a sock and put it on your left foot and then pick another sock and put it on your right foot. You leave the house with a white sock on your left foot and a brown sock on your right foot.
- A) $\frac{4}{45} \approx 0.089$ B) $\frac{4}{15} \approx 0.267$
 C) $\frac{3}{13} \approx 0.231$ D) $\frac{1}{4} = 0.25$
- 3) You flip a coin twice. The first flip lands heads-up and the second flip also lands heads-up.
- A) $\frac{1}{4} = 0.25$ B) $\frac{7}{30} \approx 0.233$
 C) $\frac{49}{225} \approx 0.218$ D) $\frac{1}{12} \approx 0.083$
- 4) A bag contains eight 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.
- A) $\frac{3}{11} \approx 0.273$ B) $\frac{1}{17} \approx 0.059$
 C) $\frac{8}{33} \approx 0.242$ D) $\frac{1}{16} \approx 0.063$
- 5) A box of chocolates contains six milk chocolates and seven dark chocolates. You randomly pick a chocolate and eat it. Then you randomly pick another piece. Both pieces are milk chocolate.
- A) $\frac{5}{26} \approx 0.192$ B) $\frac{1}{11} \approx 0.091$
 C) $\frac{5}{18} \approx 0.278$ D) $\frac{14}{39} \approx 0.359$
- 6) You select two cards from a standard shuffled deck of 52 cards. Both selected cards are diamonds. (Note that 13 of the 52 cards are diamonds.)
- A) $\frac{15}{91} \approx 0.165$ B) $\frac{8}{33} \approx 0.242$
 C) $\frac{1}{17} \approx 0.059$ D) $\frac{4}{15} \approx 0.267$

7) A cooler contains thirteen bottles of sports drink: five lemon-lime flavored, three orange flavored, and five fruit-punch flavored. You randomly grab a bottle. Then you return the bottle to the cooler, mix up the bottles, and randomly select another bottle. Both times you get a lemon-lime drink.

- A) $\frac{24}{91} \approx 0.264$ B) $\frac{1}{36} \approx 0.028$
C) $\frac{1}{4} = 0.25$ D) $\frac{25}{169} \approx 0.148$

9) There are ten shirts in your closet, six blue and four 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.

- A) $\frac{5}{18} \approx 0.278$ B) $\frac{1}{4} = 0.25$
C) $\frac{4}{15} \approx 0.267$ D) $\frac{15}{56} \approx 0.268$

11) There are eight boys and four girls in a class. The teacher randomly selects one student to answer a question. Later, the teacher randomly selects a different student to answer another question. The first student is a boy and the second student is a girl.

- A) $\frac{9}{121} \approx 0.074$ B) $\frac{1}{36} \approx 0.028$
C) $\frac{25}{169} \approx 0.148$ D) $\frac{8}{33} \approx 0.242$

8) You flip a coin twice. The first flip lands heads-up and the second flip lands tails-up.

- A) $\frac{1}{12} \approx 0.083$ B) $\frac{1}{64} \approx 0.016$
C) $\frac{1}{4} = 0.25$ D) $\frac{1}{17} \approx 0.059$

10) A cooler contains fifteen bottles of sports drink: seven lemon-lime flavored and eight orange flavored. You randomly grab a bottle and give it to your friend. Then, you randomly grab a bottle for yourself. Your friend gets a lemon-lime and you get an orange.

- A) $\frac{1}{9} \approx 0.111$ B) $\frac{1}{11} \approx 0.091$
C) $\frac{4}{15} \approx 0.267$ D) $\frac{2}{7} \approx 0.286$

12) There are ten shirts in your closet, four blue and six 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.

- A) $\frac{7}{26} \approx 0.269$ B) $\frac{1}{4} = 0.25$
C) $\frac{4}{15} \approx 0.267$ D) $\frac{3}{11} \approx 0.273$

13) A spinner has an equal chance of landing on each of its six numbered regions. You spin twice. The first spin lands in region six and the second spin lands in region one.

- A) $\frac{1}{36} \approx 0.028$ B) $\frac{1}{4} = 0.25$
C) $\frac{1}{16} \approx 0.063$ D) $\frac{10}{39} \approx 0.256$

15) A box of chocolates contains six milk chocolates and five dark chocolates. You randomly pick a chocolate and eat it. Then you randomly pick another piece. The first piece is milk chocolate and the second piece is dark chocolate.

- A) $\frac{1}{4} = 0.25$ B) $\frac{3}{11} \approx 0.273$
C) $\frac{1}{17} \approx 0.059$ D) $\frac{4}{15} \approx 0.267$

17) You flip a coin twice. The first flip lands tails-up and the second flip lands heads-up.

- A) $\frac{6}{55} \approx 0.109$ B) $\frac{1}{4} = 0.25$
C) $\frac{2}{9} \approx 0.222$ D) $\frac{5}{18} \approx 0.278$

19) A bag contains six red marbles and seven blue marbles. You randomly pick a marble and then return it to the bag before picking another marble. The first marble is red and the second marble is blue.

- A) $\frac{1}{3} \approx 0.333$ B) $\frac{42}{169} \approx 0.249$
C) $\frac{1}{4} = 0.25$ D) $\frac{5}{26} \approx 0.192$

14) A basket contains four apples and five peaches. You randomly select one piece of fruit and eat it. Then you randomly select another piece of fruit. Both pieces of fruit are apples.

- A) $\frac{1}{6} \approx 0.167$ B) $\frac{7}{26} \approx 0.269$
C) $\frac{4}{15} \approx 0.267$ D) $\frac{3}{11} \approx 0.273$

16) A bag contains four red marbles and six blue marbles. You randomly pick a marble and then return it to the bag before picking another marble. Both the first and second marbles are red.

- A) $\frac{4}{25} = 0.16$ B) $\frac{8}{45} \approx 0.178$
C) $\frac{1}{4} = 0.25$ D) $\frac{1}{8} = 0.125$

18) There are eight shirts in your closet, four blue and four 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.

- A) $\frac{4}{49} \approx 0.082$ B) $\frac{10}{39} \approx 0.256$
C) $\frac{2}{7} \approx 0.286$ D) $\frac{2}{9} \approx 0.222$

20) You flip a coin and then roll a fair six-sided die. The coin lands heads-up and the die shows a three.

- A) $\frac{56}{225} \approx 0.249$ B) $\frac{1}{12} \approx 0.083$
C) $\frac{25}{196} \approx 0.128$ D) $\frac{5}{33} \approx 0.152$

21) A basket contains five apples and seven peaches. You randomly select one piece of fruit and eat it. Then you randomly select another piece of fruit. Both pieces of fruit are apples.

- A) $\frac{1}{12} \approx 0.083$ B) $\frac{1}{45} \approx 0.022$
C) $\frac{5}{33} \approx 0.152$ D) $\frac{3}{11} \approx 0.273$

22) There are thirteen shirts in your closet, five blue and eight 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.

- A) $\frac{3}{11} \approx 0.273$ B) $\frac{5}{18} \approx 0.278$
C) $\frac{10}{39} \approx 0.256$ D) $\frac{14}{55} \approx 0.255$

23) There are fourteen shirts in your closet, seven blue and seven 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.

- A) $\frac{42}{169} \approx 0.249$ B) $\frac{9}{49} \approx 0.184$
C) $\frac{7}{26} \approx 0.269$ D) $\frac{49}{144} \approx 0.34$

24) There are eight nickels and four dimes in your pocket. You randomly pick a coin out of your pocket and then return it to your pocket. Then you randomly pick another coin. Both times the coin is a nickel.

- A) $\frac{1}{11} \approx 0.091$ B) $\frac{14}{55} \approx 0.255$
C) $\frac{4}{9} \approx 0.444$ D) $\frac{1}{4} = 0.25$

25) Your sock drawer has two white socks, six brown socks, and four black socks. You randomly pick a sock and put it on your left foot and then pick another sock and put it on your right foot. You leave the house with a white sock on your left foot and a brown sock on your right foot.

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26) A cooler contains eight bottles of sports drink: four lemon-lime flavored and four orange flavored. You randomly grab a bottle and give it to your friend. Then, you randomly grab a bottle for yourself. Your friend gets a lemon-lime and you get an orange.

- A) $\frac{2}{15} \approx 0.133$ B) $\frac{2}{7} \approx 0.286$
C) $\frac{6}{55} \approx 0.109$ D) $\frac{1}{36} \approx 0.028$

27) A bag contains seven red marbles and six blue marbles. You randomly pick a marble and then pick a second marble without returning the marbles to the bag. Both marbles are red.

A) $\frac{35}{144} \approx 0.243$

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

C) $\frac{7}{26} \approx 0.269$

D) $\frac{36}{169} \approx 0.213$

28) A basket contains six apples and five peaches. You randomly select one piece of fruit and eat it. Then you randomly select another piece of fruit. Both pieces of fruit are apples.

A) $\frac{40}{169} \approx 0.237$

B) $\frac{3}{11} \approx 0.273$

C) $\frac{12}{49} \approx 0.245$

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

29) A box of chocolates contains seven milk chocolates and seven dark chocolates. You randomly pick a chocolate and eat it. Then you randomly pick another piece. Both pieces are milk chocolate.

A) $\frac{25}{144} \approx 0.174$

B) $\frac{3}{13} \approx 0.231$

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

D) $\frac{24}{91} \approx 0.264$

30) You roll a fair six-sided die twice. The first roll shows a six and the second roll shows a one.

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

B) $\frac{25}{169} \approx 0.148$

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