

Assignment

Date _____ Period _____

Solve each equation.

1) $|-4 + x| = 3$

2) $|-2x| = 20$

3) $|n - 6| = 1$

4) $|x - 10| = 17$

5) $|5a| = 10$

6) $|a + 8| = 14$

7) $|6x| = 42$

8) $|-4x| = 8$

9) $\left|\frac{n}{2}\right| = 5$

10) $|-10x| = 30$

11) $|r + 6| = 1$

12) $|-4x| = 36$

13) $|b + 5| = 14$

14) $|x + 7| = 16$

15) $|x - 10| = 19$

16) $|10n| = 20$

17) $|5r| = 15$

18) $|v - 9| = 17$

19) $|v + 6| = 3$

20) $|-2x| = 6$

21) $|3x - 9| = 18$

22) $|-4x - 5| = 7$

23) $|8 - 6b| = 38$

24) $|6v - 6| = 54$

25) $|8r + 1| = 25$

26) $|-3b + 6| = 36$

27) $|-3n - 6| = 15$

28) $|3 + 7v| = 73$

29) $|-8x + 2| = 30$

30) $|5n + 1| = 31$

31) $|-5n + 1| = 46$

32) $|6k + 5| = 43$

$$33) |9r - 9| = 81$$

$$34) |5k + 8| = 43$$

$$35) |6r + 5| = 41$$

$$36) |-p + 2| = 9$$

$$37) |1 + 2x| = 3$$

$$38) |10 + 6p| = 46$$

$$39) |7 + 5n| = 2$$

$$40) |9 - 3n| = 39$$

$$41) -5|9m + 8| = -40$$

$$42) -8|-10 - 4b| = -48$$

$$43) \frac{|3x + 5|}{3} = 4$$

$$44) |-3 + 8x| - 8 = 75$$

$$45) -3|6a - 1| = -57$$

$$46) \frac{|6 + 5x|}{5} = 1$$

$$47) 7|8m + 1| = 49$$

$$48) |2 + 3x| + 2 = 22$$

$$49) \frac{|8v - 7|}{5} = 4$$

$$50) 5|9n + 7| = 10$$

$$51) \frac{|7 - n|}{4} = 1$$

$$52) |9x - 9| + 7 = 70$$

$$53) -9 + |8 + 6r| = 11$$

$$54) |9 + 4x| + 10 = 23$$

$$55) 6|5 - 10a| = 90$$

$$56) -5|5v - 9| = -45$$

$$57) 5|-9r - 5| = 110$$

$$58) \frac{|5 - 10x|}{6} = 4$$

$$59) |10 + 6r| - 9 = 37$$

$$60) |5a + 2| - 10 = 22$$

$$61) 9|5n - 10| - 2 = 88$$

$$62) |4 + 3n| - 4 = 0$$

$$63) -|4v + 10| + 8 = -6$$

$$64) 10 + |4a - 7| = 41$$

65) $|-2n - 8| + 5 = 9$

66) $-7|-5 - 5r| + 5 = -30$

67) $-|-4 - 8a| + 6 = -78$

68) $8|9 + 2n| + 8 = 32$

69) $2 + 2|9r + 5| = 10$

70) $4|-x + 4| + 8 = 24$

71) $7|1 + 4n| + 8 = 43$

72) $-1 - 10|3 + 9n| = -61$

73) $|8v + 10| - 2 = 8$

74) $4|6 - 10m| + 8 = 112$

75) $1 - 6|3v + 5| = -95$

76) $7 - |-4 - 10n| = -7$

77) $-8 - 6|2 - 7n| = -104$

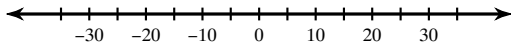
78) $6|1 - 8m| - 9 = 93$

79) $8 - 3|7p - 7| = -55$

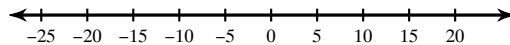
80) $1 - 2|10x - 6| = -111$

Solve each inequality and graph its solution.

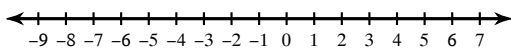
81) $\left|\frac{n}{9}\right| \leq 4$



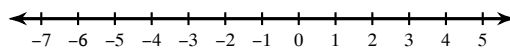
82) $\left|\frac{x}{4}\right| \geq 5$



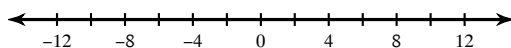
83) $|-10p| < 60$



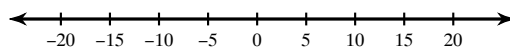
84) $|-9n| > 9$



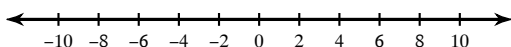
85) $\left|\frac{x}{2}\right| > 4$



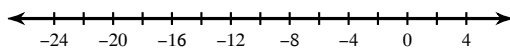
86) $\left|\frac{b}{6}\right| \geq 3$



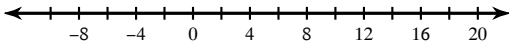
87) $\left|\frac{v}{9}\right| < 1$



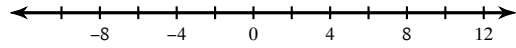
88) $|9 + x| \leq 13$



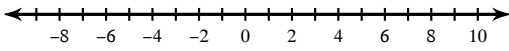
89) $|x - 5| < 13$



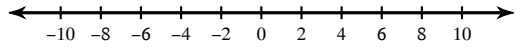
90) $|3a| \geq 24$



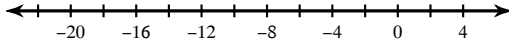
91) $|5n| < 40$



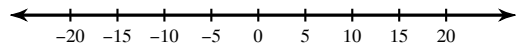
92) $|3r| \leq 30$



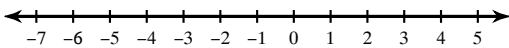
93) $|x + 9| \geq 10$



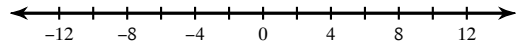
94) $\left|\frac{k}{10}\right| \geq 2$



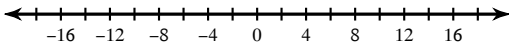
95) $\left|\frac{n}{4}\right| \leq 1$



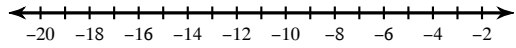
96) $|9p| \geq 81$



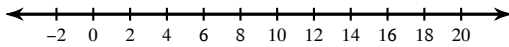
97) $\left|\frac{x}{5}\right| \leq 3$



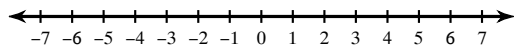
98) $|x + 10| \leq 7$



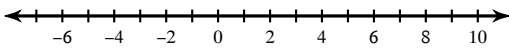
99) $|-9 + x| > 7$



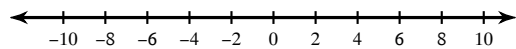
100) $\left|\frac{p}{2}\right| < 2$



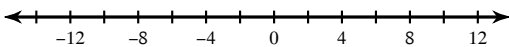
101) $|7v - 6| \leq 43$



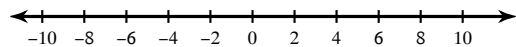
102) $|1 - 7r| > 48$



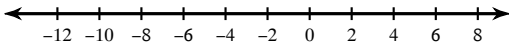
103) $|-4m - 2| < 42$



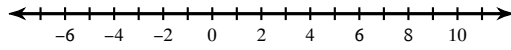
104) $|6v - 6| \geq 42$



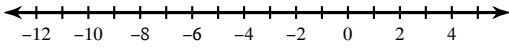
$$105) |2x + 5| \leq 15$$



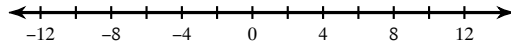
$$106) |5p - 7| \leq 33$$



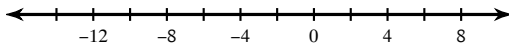
$$107) |3k + 7| \leq 20$$



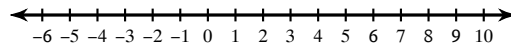
$$108) |4 - 6b| \leq 64$$



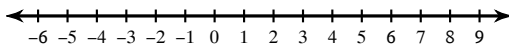
$$109) |n + 3| \geq 9$$



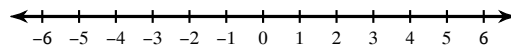
$$110) |9 - 4x| > 15$$



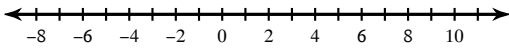
$$111) |9v - 10| \geq 37$$



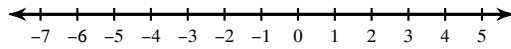
$$112) |5x - 3| > 8$$



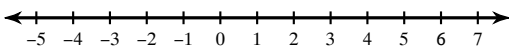
$$113) |7 - 7n| \leq 49$$



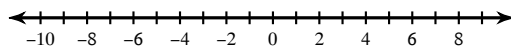
$$114) |3 + 7k| \leq 11$$



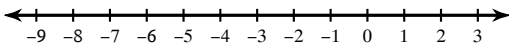
$$115) |2n - 6| < 6$$



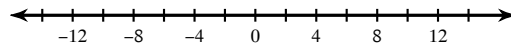
$$116) |-5 + 8n| < 61$$



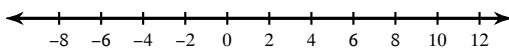
$$117) |2x + 4| < 6$$



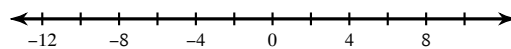
$$118) |3 - 6x| > 63$$



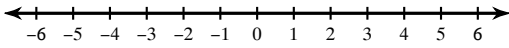
$$119) |5x - 8| \geq 28$$



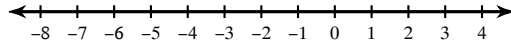
$$120) |6x + 5| > 47$$



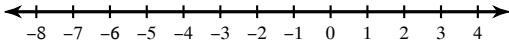
$$121) |7k + 5| - 1 < 1$$



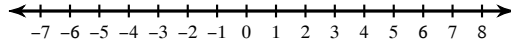
$$122) -7 + |9a - 9| \leq 2$$



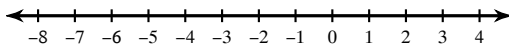
$$123) 7|-6k - 4| < 70$$



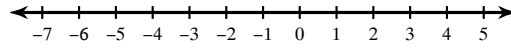
$$124) \frac{|6 - 7x|}{10} < 4$$



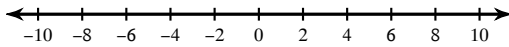
$$125) \frac{|4 - 7b|}{4} > 2$$



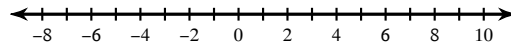
$$126) 9|-1 - 8r| > 81$$



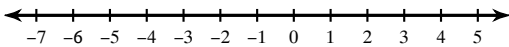
$$127) |3 + 6p| + 6 > 45$$



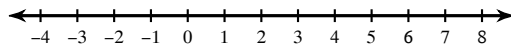
$$128) |1 + 6n| - 5 > 26$$



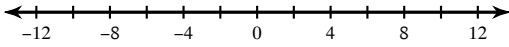
$$129) \frac{|10n - 9|}{8} \leq 3$$



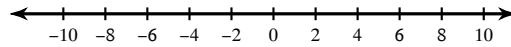
$$130) 6 + |3 + 8r| < 9$$



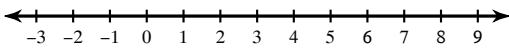
$$131) -4 + |-7p - 3| \leq 62$$



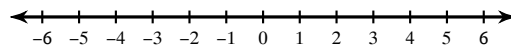
$$132) -2|3 + 6x| < -90$$



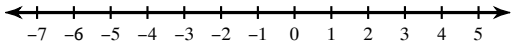
$$133) |5 - 3x| - 7 \leq -2$$



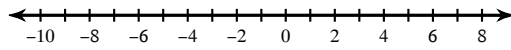
$$134) \frac{|-7b + 4|}{5} > 2$$



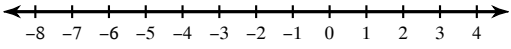
$$135) \frac{|8a + 6|}{4} > 4$$



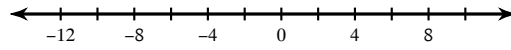
$$136) |-2x - 2| + 7 < 21$$



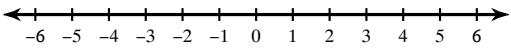
$$137) \frac{|4m + 5|}{4} \leq 4$$



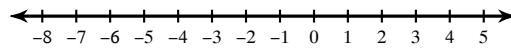
$$138) |5p + 8| + 7 > 50$$



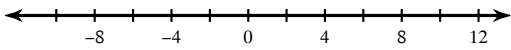
$$139) -2 + |-4 - 7b| \leq 9$$



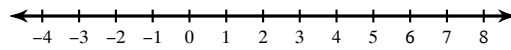
$$140) 1 + |6 + 6m| > 19$$



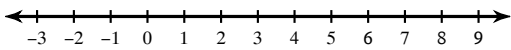
$$141) 2|-7x - 1| + 4 \geq 118$$



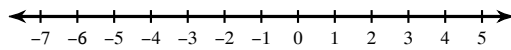
$$142) -5|9 - 10m| + 9 < -96$$



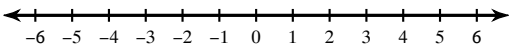
$$143) 10|5k - 8| + 3 > 73$$



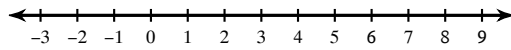
$$144) 7|4 + 9b| - 8 < 90$$



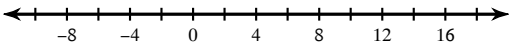
$$145) -6|7 - 4x| - 6 \geq -96$$



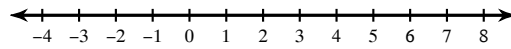
$$146) 2 + 8|9x + 2| \leq 90$$



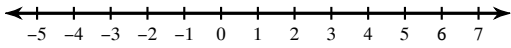
$$147) 1 - 5|-2n + 9| \geq -114$$



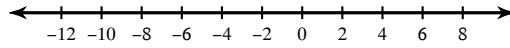
$$148) 1 + 9|9v - 4| \geq 37$$



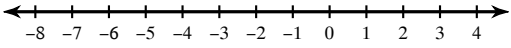
$$149) 10|5n - 1| + 1 > 111$$



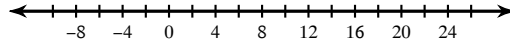
$$150) 4|8 + 3n| + 6 \geq 86$$



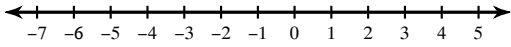
$$151) 2 + 8|5v + 8| < 106$$



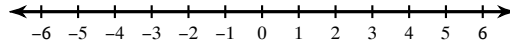
$$152) -5|x - 8| - 5 \leq -85$$



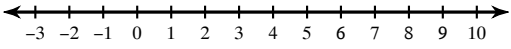
$$153) -2 - 8|-5x - 7| < -18$$



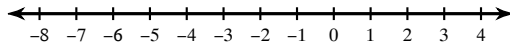
$$154) 7 + |1 + 8x| \geq 22$$



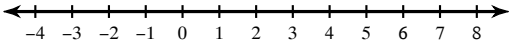
$$155) 7 + 2|8 - 3x| \leq 39$$



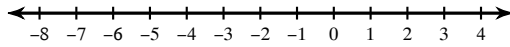
$$156) 10|10n + 2| - 2 < 18$$



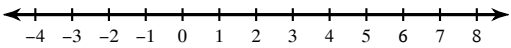
$$157) 10 - |1 - 4b| \geq 7$$



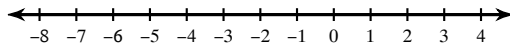
$$158) 1 + 9|5v + 8| < 109$$



$$159) -9|-7x - 10| + 9 > -81$$



$$160) 1 + 8|5n - 3| < 65$$



Find the probability.

161) A cooler contains thirteen bottles of sports drink: four lemon-lime flavored, four 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.

162) There are thirteen shirts in your closet, six blue and seven green. You randomly select one to wear on Monday and then a different one on Tuesday. You wear blue shirts both days.

- 163) A basket contains eight apples and four peaches. You randomly select one piece of fruit and eat it. Then you randomly select another piece of fruit. The first piece of fruit is an apple and the second piece is a peach.
- 164) There are four nickels and four dimes in your pocket. You randomly pick a coin out of your pocket and place it on a counter. Then you randomly pick another coin. Both coins are nickels.
- 165) A bag contains three red marbles and three 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.
- 166) A bag contains five 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.
- 167) A bag contains six red marbles and eight 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.
- 168) A cooler contains ten bottles of sports drink: six 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.
- 169) There are six nickels and six dimes in your pocket. You randomly pick a coin out of your pocket and place it on a counter. Then you randomly pick another coin. The first coin is a nickel and the second coin is a dime.
- 170) A basket contains eight 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.
- 171) There are seven nickels and seven dimes in your pocket. You randomly pick a coin out of your pocket and place it on a counter. Then you randomly pick another coin. Both coins are nickels.
- 172) You flip a coin twice. The first flip lands tails-up and the second flip lands heads-up.
- 173) A cooler contains fourteen bottles of sports drink: six 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. You and your friend both get lemon-lime.
- 174) A box of chocolates contains five milk chocolates and eight dark chocolates. You randomly pick a chocolate and eat it. Then you randomly pick another piece. Both pieces are milk chocolate.

- 175) A basket contains seven apples and eight 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.
- 176) There are eight nickels and four dimes in your pocket. You randomly pick a coin out of your pocket and place it on a counter. Then you randomly pick another coin. Both coins are nickels.
- 177) A bag contains five 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.
- 178) A bag contains four red marbles and three 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.
- 179) There are eight nickels and six 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. The first coin is a nickel and the second coin is a dime.
- 180) 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.
- 181) 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.)
- 182) There are five nickels and four dimes in your pocket. You randomly pick a coin out of your pocket and place it on a counter. Then you randomly pick another coin. The first coin is a nickel and the second coin is a dime.
- 183) A bag contains six red marbles and eight blue marbles. You randomly pick a marble and then pick a second marble without returning the marbles to the bag. Both marbles are red.
- 184) A bag contains eight red marbles and five blue marbles. You randomly pick a marble and then pick a second marble without returning the marbles to the bag. Both marbles are red.
- 185) Your sock drawer has six white socks, six brown socks, and two 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.
- 186) There are five nickels and eight dimes in your pocket. You randomly pick a coin out of your pocket and place it on a counter. Then you randomly pick another coin. The first coin is a nickel and the second coin is a dime.

187) There are thirteen shirts in your closet, seven blue and six green. You randomly select one to wear on Monday and then a different one on Tuesday. You wear blue shirts both days.

188) Your sock drawer has two white socks, four brown socks, and two black socks. You randomly pick two socks and get a matching pair of black socks.

189) There are eleven shirts in your closet, five 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.

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

Assignment

Date _____ Period _____

Solve each equation.

1) $|-4 + x| = 3$
 $\{7, 1\}$

3) $|n - 6| = 1$
 $\{7, 5\}$

5) $|5a| = 10$
 $\{2, -2\}$

7) $|6x| = 42$
 $\{7, -7\}$

9) $\left|\frac{n}{2}\right| = 5$
 $\{10, -10\}$

11) $|r + 6| = 1$
 $\{-5, -7\}$

13) $|b + 5| = 14$
 $\{9, -19\}$

15) $|x - 10| = 19$
 $\{29, -9\}$

17) $|5r| = 15$
 $\{3, -3\}$

19) $|v + 6| = 3$
 $\{-3, -9\}$

21) $|3x - 9| = 18$
 $\{9, -3\}$

23) $|8 - 6b| = 38$ $\left\{-5, \frac{23}{3}\right\}$

25) $|8r + 1| = 25$ $\left\{3, -\frac{13}{4}\right\}$

27) $|-3n - 6| = 15$
 $\{-7, 3\}$

29) $|-8x + 2| = 30$ $\left\{-\frac{7}{2}, 4\right\}$

31) $|-5n + 1| = 46$ $\left\{-9, \frac{47}{5}\right\}$

2) $|-2x| = 20$
 $\{-10, 10\}$

4) $|x - 10| = 17$
 $\{27, -7\}$

6) $|a + 8| = 14$
 $\{6, -22\}$

8) $|-4x| = 8$
 $\{-2, 2\}$

10) $|-10x| = 30$
 $\{-3, 3\}$

12) $|-4x| = 36$
 $\{-9, 9\}$

14) $|x + 7| = 16$
 $\{9, -23\}$

16) $|10n| = 20$
 $\{2, -2\}$

18) $|v - 9| = 17$
 $\{26, -8\}$

20) $|-2x| = 6$
 $\{-3, 3\}$

22) $|-4x - 5| = 7$ $\left\{-3, \frac{1}{2}\right\}$

24) $|6v - 6| = 54$
 $\{10, -8\}$

26) $|-3b + 6| = 36$
 $\{-10, 14\}$

28) $|3 + 7v| = 73$ $\left\{10, -\frac{76}{7}\right\}$

30) $|5n + 1| = 31$ $\left\{6, -\frac{32}{5}\right\}$

32) $|6k + 5| = 43$ $\left\{\frac{19}{3}, -8\right\}$

$$33) |9r - 9| = 81$$

$$\{10, -8\}$$

$$35) |6r + 5| = 41 \quad \left\{6, -\frac{23}{3}\right\}$$

$$37) |1 + 2x| = 3$$

$$\{1, -2\}$$

$$39) |7 + 5n| = 2 \quad \left\{-1, -\frac{9}{5}\right\}$$

$$41) -5|9m + 8| = -40 \quad \left\{0, -\frac{16}{9}\right\}$$

$$43) \frac{|3x + 5|}{3} = 4 \quad \left\{\frac{7}{3}, -\frac{17}{3}\right\}$$

$$45) -3|6a - 1| = -57 \quad \left\{\frac{10}{3}, -3\right\}$$

$$47) 7|8m + 1| = 49 \quad \left\{\frac{3}{4}, -1\right\}$$

$$49) \frac{|8v - 7|}{5} = 4 \quad \left\{\frac{27}{8}, -\frac{13}{8}\right\}$$

$$51) \frac{|7 - n|}{4} = 1$$

$$\{3, 11\}$$

$$53) -9 + |8 + 6r| = 11 \quad \left\{2, -\frac{14}{3}\right\}$$

$$55) 6|5 - 10a| = 90$$

$$\{-1, 2\}$$

$$57) 5|-9r - 5| = 110 \quad \left\{-3, \frac{17}{9}\right\}$$

$$59) |10 + 6r| - 9 = 37 \quad \left\{6, -\frac{28}{3}\right\}$$

$$61) 9|5n - 10| - 2 = 88$$

$$\{4, 0\}$$

$$63) -|4v + 10| + 8 = -6$$

$$\{1, -6\}$$

$$34) |5k + 8| = 43 \quad \left\{7, -\frac{51}{5}\right\}$$

$$36) |-p + 2| = 9$$

$$\{-7, 11\}$$

$$38) |10 + 6p| = 46 \quad \left\{6, -\frac{28}{3}\right\}$$

$$40) |9 - 3n| = 39$$

$$\{-10, 16\}$$

$$42) -8|-10 - 4b| = -48$$

$$\{-4, -1\}$$

$$44) |-3 + 8x| - 8 = 75 \quad \left\{\frac{43}{4}, -10\right\}$$

$$46) \frac{|6 + 5x|}{5} = 1 \quad \left\{-\frac{1}{5}, -\frac{11}{5}\right\}$$

$$48) |2 + 3x| + 2 = 22 \quad \left\{6, -\frac{22}{3}\right\}$$

$$50) 5|9n + 7| = 10 \quad \left\{-\frac{5}{9}, -1\right\}$$

$$52) |9x - 9| + 7 = 70$$

$$\{8, -6\}$$

$$54) |9 + 4x| + 10 = 23 \quad \left\{1, -\frac{11}{2}\right\}$$

$$56) -5|5v - 9| = -45 \quad \left\{\frac{18}{5}, 0\right\}$$

$$58) \frac{|5 - 10x|}{6} = 4 \quad \left\{-\frac{19}{10}, \frac{29}{10}\right\}$$

$$60) |5a + 2| - 10 = 22 \quad \left\{6, -\frac{34}{5}\right\}$$

$$62) |4 + 3n| - 4 = 0 \quad \left\{0, -\frac{8}{3}\right\}$$

$$64) 10 + |4a - 7| = 41 \quad \left\{\frac{19}{2}, -6\right\}$$

$$65) \quad |-2n - 8| + 5 = 9$$

$$\quad \quad \quad \{-6, -2\}$$

$$67) \quad -|-4 - 8a| + 6 = -78$$

$$\quad \quad \quad \{-11, 10\}$$

$$69) \quad 2 + 2|9r + 5| = 10 \quad \left\{-\frac{1}{9}, -1\right\}$$

$$71) \quad 7|1 + 4n| + 8 = 43 \quad \left\{1, -\frac{3}{2}\right\}$$

$$73) \quad |8v + 10| - 2 = 8 \quad \left\{0, -\frac{5}{2}\right\}$$

$$75) \quad 1 - 6|3v + 5| = -95 \quad \left\{\frac{11}{3}, -7\right\}$$

$$77) \quad -8 - 6|2 - 7n| = -104 \quad \left\{-2, \frac{18}{7}\right\}$$

$$79) \quad 8 - 3|7p - 7| = -55$$

$$\quad \quad \quad \{4, -2\}$$

$$66) \quad -7|-5 - 5r| + 5 = -30$$

$$\quad \quad \quad \{-2, 0\}$$

$$68) \quad 8|9 + 2n| + 8 = 32$$

$$\quad \quad \quad \{-3, -6\}$$

$$70) \quad 4|-x + 4| + 8 = 24$$

$$\quad \quad \quad \{0, 8\}$$

$$72) \quad -1 - 10|3 + 9n| = -61 \quad \left\{\frac{1}{3}, -1\right\}$$

$$74) \quad 4|6 - 10m| + 8 = 112 \quad \left\{-2, \frac{16}{5}\right\}$$

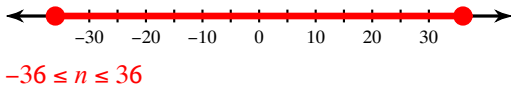
$$76) \quad 7 - |-4 - 10n| = -7 \quad \left\{-\frac{9}{5}, 1\right\}$$

$$78) \quad 6|1 - 8m| - 9 = 93 \quad \left\{-2, \frac{9}{4}\right\}$$

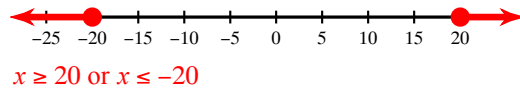
$$80) \quad 1 - 2|10x - 6| = -111 \quad \left\{\frac{31}{5}, -5\right\}$$

Solve each inequality and graph its solution.

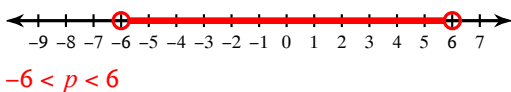
$$81) \quad \left|\frac{n}{9}\right| \leq 4$$



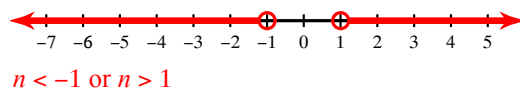
$$82) \quad \left|\frac{x}{4}\right| \geq 5$$



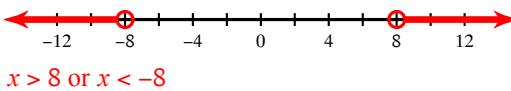
$$83) \quad |-10p| < 60$$



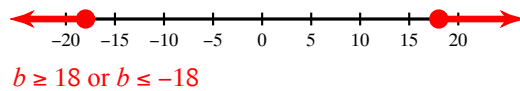
$$84) \quad |-9n| > 9$$



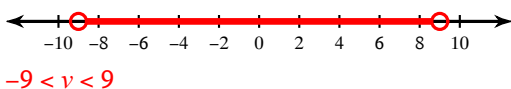
$$85) \quad \left|\frac{x}{2}\right| > 4$$



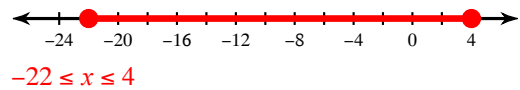
$$86) \quad \left|\frac{b}{6}\right| \geq 3$$



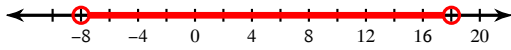
$$87) \quad \left|\frac{v}{9}\right| < 1$$



$$88) \quad |9 + x| \leq 13$$

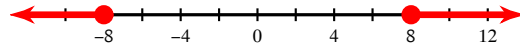


$$89) |x - 5| < 13$$



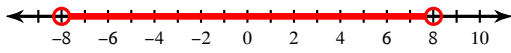
$$-8 < x < 18$$

$$90) |3a| \geq 24$$



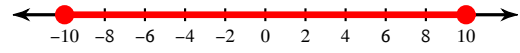
$$a \geq 8 \text{ or } a \leq -8$$

$$91) |5n| < 40$$



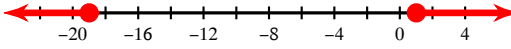
$$-8 < n < 8$$

$$92) |3r| \leq 30$$



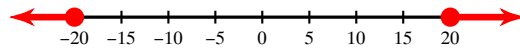
$$-10 \leq r \leq 10$$

$$93) |x + 9| \geq 10$$



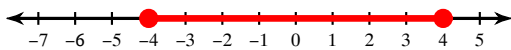
$$x \geq 1 \text{ or } x \leq -19$$

$$94) \left| \frac{k}{10} \right| \geq 2$$



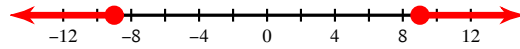
$$k \geq 20 \text{ or } k \leq -20$$

$$95) \left| \frac{n}{4} \right| \leq 1$$



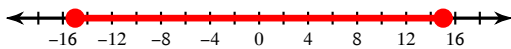
$$-4 \leq n \leq 4$$

$$96) |9p| \geq 81$$



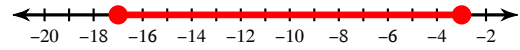
$$p \geq 9 \text{ or } p \leq -9$$

$$97) \left| \frac{x}{5} \right| \leq 3$$



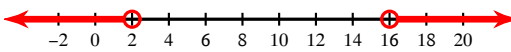
$$-15 \leq x \leq 15$$

$$98) |x + 10| \leq 7$$



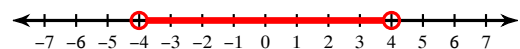
$$-17 \leq x \leq -3$$

$$99) |-9 + x| > 7$$



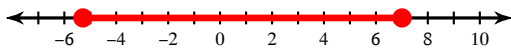
$$x > 16 \text{ or } x < 2$$

$$100) \left| \frac{p}{2} \right| < 2$$



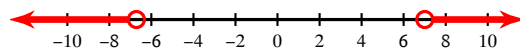
$$-4 < p < 4$$

$$101) |7v - 6| \leq 43$$



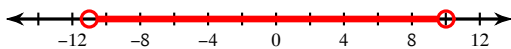
$$-\frac{37}{7} \leq v \leq 7$$

$$102) |1 - 7r| > 48$$



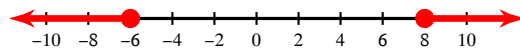
$$r < -\frac{47}{7} \text{ or } r > 7$$

$$103) |-4m - 2| < 42$$



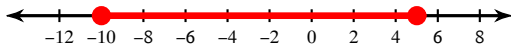
$$-11 < m < 10$$

$$104) |6v - 6| \geq 42$$



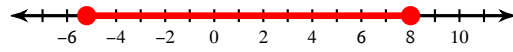
$$v \geq 8 \text{ or } v \leq -6$$

$$105) |2x + 5| \leq 15$$



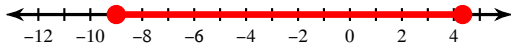
$$-10 \leq x \leq 5$$

$$106) |5p - 7| \leq 33$$



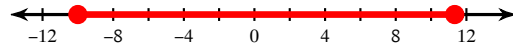
$$-\frac{26}{5} \leq p \leq 8$$

$$107) |3k + 7| \leq 20$$



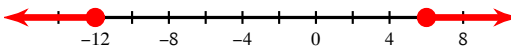
$$-9 \leq k \leq \frac{13}{3}$$

$$108) |4 - 6b| \leq 64$$



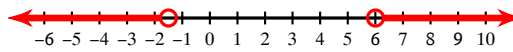
$$-10 \leq b \leq \frac{34}{3}$$

$$109) |n + 3| \geq 9$$



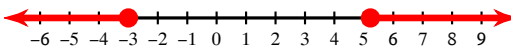
$$n \geq 6 \text{ or } n \leq -12$$

$$110) |9 - 4x| > 15$$



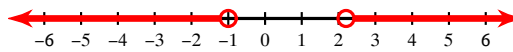
$$x < -\frac{3}{2} \text{ or } x > 6$$

$$111) |9v - 10| \geq 37$$



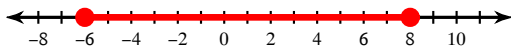
$$v \geq \frac{47}{9} \text{ or } v \leq -3$$

$$112) |5x - 3| > 8$$



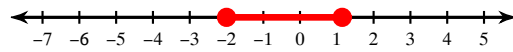
$$x > \frac{11}{5} \text{ or } x < -1$$

$$113) |7 - 7n| \leq 49$$



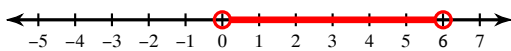
$$-6 \leq n \leq 8$$

$$114) |3 + 7k| \leq 11$$



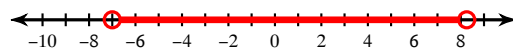
$$-2 \leq k \leq \frac{8}{7}$$

$$115) |2n - 6| < 6$$



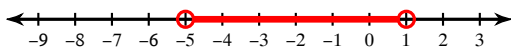
$$0 < n < 6$$

$$116) |-5 + 8n| < 61$$



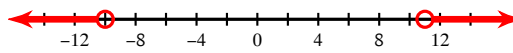
$$-7 < n < \frac{33}{4}$$

$$117) |2x + 4| < 6$$



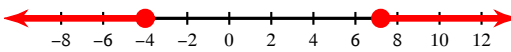
$$-5 < x < 1$$

$$118) |3 - 6x| > 63$$



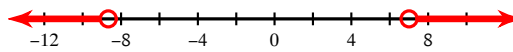
$$x < -10 \text{ or } x > 11$$

$$119) |5x - 8| \geq 28$$



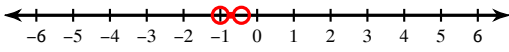
$$x \geq \frac{36}{5} \text{ or } x \leq -4$$

$$120) |6x + 5| > 47$$



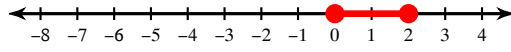
$$x > 7 \text{ or } x < -\frac{26}{3}$$

$$121) |7k + 5| - 1 < 1$$



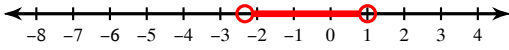
$$-1 < k < -\frac{3}{7}$$

$$122) -7 + |9a - 9| \leq 2$$



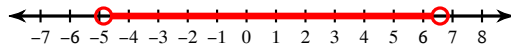
$$0 \leq a \leq 2$$

$$123) 7|-6k - 4| < 70$$



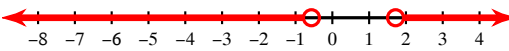
$$-\frac{7}{3} < k < 1$$

$$124) \frac{|6 - 7x|}{10} < 4$$



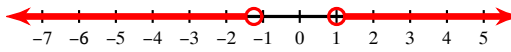
$$-\frac{34}{7} < x < \frac{46}{7}$$

$$125) \frac{|4 - 7b|}{4} > 2$$



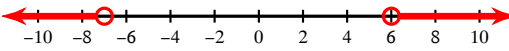
$$b < -\frac{4}{7} \text{ or } b > \frac{12}{7}$$

$$126) 9|-1 - 8r| > 81$$



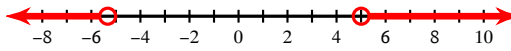
$$r < -\frac{5}{4} \text{ or } r > 1$$

$$127) |3 + 6p| + 6 > 45$$



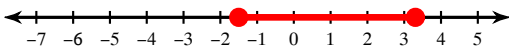
$$p > 6 \text{ or } p < -7$$

$$128) |1 + 6n| - 5 > 26$$



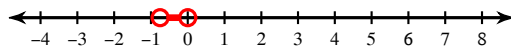
$$n > 5 \text{ or } n < -\frac{16}{3}$$

$$129) \frac{|10n - 9|}{8} \leq 3$$



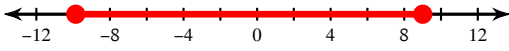
$$-\frac{3}{2} \leq n \leq \frac{33}{10}$$

$$130) 6 + |3 + 8r| < 9$$



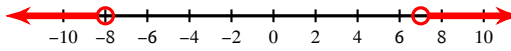
$$-\frac{3}{4} < r < 0$$

$$131) -4 + |-7p - 3| \leq 62$$



$$-\frac{69}{7} \leq p \leq 9$$

$$132) -2|3 + 6x| < -90$$



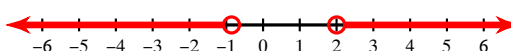
$$x > 7 \text{ or } x < -8$$

$$133) |5 - 3x| - 7 \leq -2$$



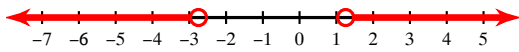
$$0 \leq x \leq \frac{10}{3}$$

$$134) \frac{|-7b + 4|}{5} > 2$$



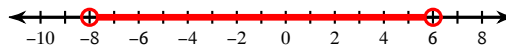
$$b < -\frac{6}{7} \text{ or } b > 2$$

$$135) \frac{|8a + 6|}{4} > 4$$



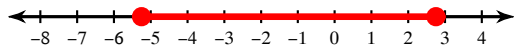
$$a > \frac{5}{4} \text{ or } a < -\frac{11}{4}$$

$$136) |-2x - 2| + 7 < 21$$



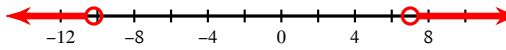
$$-8 < x < 6$$

$$137) \frac{|4m + 5|}{4} \leq 4$$



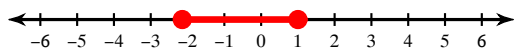
$$-\frac{21}{4} \leq m \leq \frac{11}{4}$$

$$138) |5p + 8| + 7 > 50$$



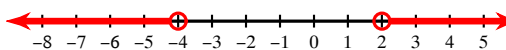
$$p > 7 \text{ or } p < -\frac{51}{5}$$

$$139) -2 + |-4 - 7b| \leq 9$$



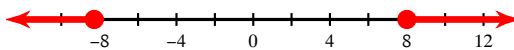
$$-\frac{15}{7} \leq b \leq 1$$

$$140) 1 + |6 + 6m| > 19$$



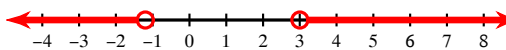
$$m > 2 \text{ or } m < -4$$

$$141) 2|-7x - 1| + 4 \geq 118$$



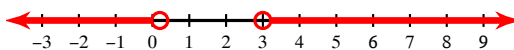
$$x \leq -\frac{58}{7} \text{ or } x \geq 8$$

$$142) -5|9 - 10m| + 9 < -96$$



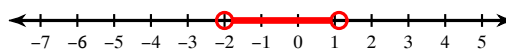
$$m < -\frac{6}{5} \text{ or } m > 3$$

$$143) 10|5k - 8| + 3 > 73$$



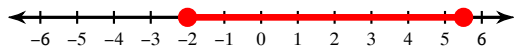
$$k > 3 \text{ or } k < \frac{1}{5}$$

$$144) 7|4 + 9b| - 8 < 90$$



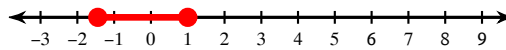
$$-2 < b < \frac{10}{9}$$

$$145) -6|7 - 4x| - 6 \geq -96$$



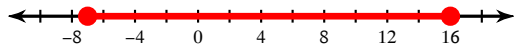
$$-2 \leq x \leq \frac{11}{2}$$

$$146) 2 + 8|9x + 2| \leq 90$$



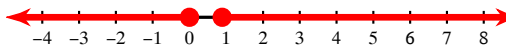
$$-\frac{13}{9} \leq x \leq 1$$

$$147) 1 - 5|-2n + 9| \geq -114$$



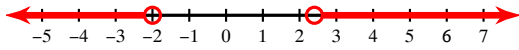
$$-7 \leq n \leq 16$$

$$148) 1 + 9|9v - 4| \geq 37$$



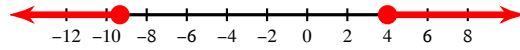
$$v \geq \frac{8}{9} \text{ or } v \leq 0$$

$$149) 10|5n - 1| + 1 > 111$$



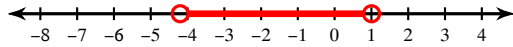
$$n > \frac{12}{5} \text{ or } n < -2$$

$$150) 4|8 + 3n| + 6 \geq 86$$



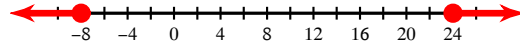
$$n \geq 4 \text{ or } n \leq -\frac{28}{3}$$

$$151) 2 + 8|5v + 8| < 106$$



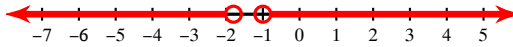
$$-\frac{21}{5} < v < 1$$

$$152) -5|x - 8| - 5 \leq -85$$



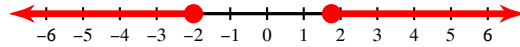
$$x \geq 24 \text{ or } x \leq -8$$

$$153) -2 - 8|-5x - 7| < -18$$



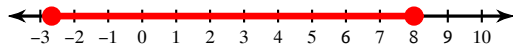
$$x < -\frac{9}{5} \text{ or } x > -1$$

$$154) 7 + |1 + 8x| \geq 22$$



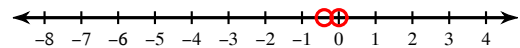
$$x \geq \frac{7}{4} \text{ or } x \leq -2$$

$$155) 7 + 2|8 - 3x| \leq 39$$



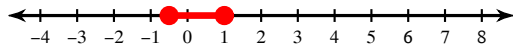
$$-\frac{8}{3} \leq x \leq 8$$

$$156) 10|10n + 2| - 2 < 18$$



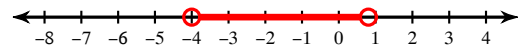
$$-\frac{2}{5} < n < 0$$

$$157) 10 - |1 - 4b| \geq 7$$



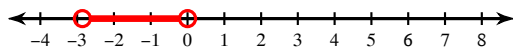
$$-\frac{1}{2} \leq b \leq 1$$

$$158) 1 + 9|5v + 8| < 109$$



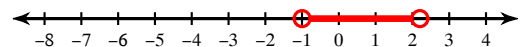
$$-4 < v < \frac{4}{5}$$

$$159) -9|-7x - 10| + 9 > -81$$



$$-\frac{20}{7} < x < 0$$

$$160) 1 + 8|5n - 3| < 65$$



$$-1 < n < \frac{11}{5}$$

Find the probability.

161) A cooler contains thirteen bottles of sports drink: four lemon-lime flavored, four 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.

$$\frac{16}{169} \approx 0.095$$

162) There are thirteen shirts in your closet, six blue and seven green. You randomly select one to wear on Monday and then a different one on Tuesday. You wear blue shirts both days.

$$\frac{5}{26} \approx 0.192$$

163) A basket contains eight apples and four peaches. You randomly select one piece of fruit and eat it. Then you randomly select another piece of fruit. The first piece of fruit is an apple and the second piece is a peach.

$$\frac{8}{33} \approx 0.242$$

165) A bag contains three red marbles and three 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.

$$\frac{3}{10} = 0.3$$

167) A bag contains six red marbles and eight 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.

$$\frac{9}{49} \approx 0.184$$

169) There are six nickels and six dimes in your pocket. You randomly pick a coin out of your pocket and place it on a counter. Then you randomly pick another coin. The first coin is a nickel and the second coin is a dime.

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

171) There are seven nickels and seven dimes in your pocket. You randomly pick a coin out of your pocket and place it on a counter. Then you randomly pick another coin. Both coins are nickels.

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

173) A cooler contains fourteen bottles of sports drink: six 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. You and your friend both get lemon-lime.

$$\frac{15}{91} \approx 0.165$$

164) There are four nickels and four dimes in your pocket. You randomly pick a coin out of your pocket and place it on a counter. Then you randomly pick another coin. Both coins are nickels.

$$\frac{3}{14} \approx 0.214$$

166) A bag contains five 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.

$$\frac{25}{121} \approx 0.207$$

168) A cooler contains ten bottles of sports drink: six 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.

$$\frac{4}{15} \approx 0.267$$

170) A basket contains eight 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.

$$\frac{14}{39} \approx 0.359$$

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

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

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

$$\frac{5}{39} \approx 0.128$$

175) A basket contains seven apples and eight 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.

$$\frac{1}{5} = 0.2$$

177) A bag contains five 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.

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

179) There are eight nickels and six 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. The first coin is a nickel and the second coin is a dime.

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

181) 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.)

$$\frac{1}{17} \approx 0.059$$

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

$$\frac{15}{91} \approx 0.165$$

185) Your sock drawer has six white socks, six brown socks, and two 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.

$$\frac{18}{91} \approx 0.198$$

176) There are eight nickels and four dimes in your pocket. You randomly pick a coin out of your pocket and place it on a counter. Then you randomly pick another coin. Both coins are nickels.

$$\frac{14}{33} \approx 0.424$$

178) A bag contains four red marbles and three 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.

$$\frac{16}{49} \approx 0.327$$

180) 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.

$$\frac{8}{33} \approx 0.242$$

182) There are five nickels and four dimes in your pocket. You randomly pick a coin out of your pocket and place it on a counter. Then you randomly pick another coin. The first coin is a nickel and the second coin is a dime.

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

184) A bag contains eight red marbles and five blue marbles. You randomly pick a marble and then pick a second marble without returning the marbles to the bag. Both marbles are red.

$$\frac{14}{39} \approx 0.359$$

186) There are five nickels and eight dimes in your pocket. You randomly pick a coin out of your pocket and place it on a counter. Then you randomly pick another coin. The first coin is a nickel and the second coin is a dime.

$$\frac{10}{39} \approx 0.256$$

187) There are thirteen shirts in your closet, seven blue and six green. You randomly select one to wear on Monday and then a different one on Tuesday. You wear blue shirts both days.

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

189) There are eleven shirts in your closet, five 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.

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

188) Your sock drawer has two white socks, four brown socks, and two black socks. You randomly pick two socks and get a matching pair of black socks.

$$\frac{1}{28} \approx 0.036$$

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

$$\frac{1}{12} \approx 0.083$$