

## Summer Review

Solve each proportion.

1)  $-\frac{5}{9} = \frac{p}{3}$

2)  $\frac{7}{m} = \frac{6}{10}$

3)  $\frac{n}{4} = -\frac{4}{5}$

4)  $\frac{b}{7} = -\frac{2}{8}$

5)  $\frac{12}{x} = \frac{4}{10}$

6)  $\frac{9}{4x} = \frac{4}{5}$

7)  $\frac{k}{12} = \frac{5}{4}$

8)  $\frac{7}{4} = -\frac{x}{9}$

9)  $\frac{n}{12} = \frac{9}{10}$

10)  $\frac{7}{11} = -\frac{8}{8n}$

Evaluate each expression.

11)  $1 - \frac{1}{2}$

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

13)  $\frac{5}{6} + 4\frac{1}{2}$

Write each as a percent. Round to the nearest tenth of a percent.

14) 0.09

15) 0.93

16) 0.8

17) 0.48

18) 0.4

19) 0.31

Write each as a percent. Write remainders as a fraction.

20)  $\frac{63}{100}$

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

22)  $4\frac{13}{33}$

23)  $8\frac{1}{2}$

24)  $\frac{21}{25}$

25)  $\frac{3}{8}$

26)  $\frac{23}{25}$

27)  $\frac{3}{10}$

Evaluate each expression.

28)  $\frac{3}{2} + 2^2$

29)  $\frac{7}{6} \times 2 - 1\frac{1}{2}$

30)  $\left(2\frac{2}{5} \times \frac{1}{5}\right) \div 2\frac{3}{4}$

31)  $(-20) - (-38) + 26$

32)  $23 - (-16) + (-45)$

33)  $(-46) - 17 - 13$

Find each quotient.

34)  $1\frac{2}{5} \div 4\frac{1}{7}$

35)  $\frac{4}{3} \div \frac{3}{2}$

36)  $4 \div 8\frac{5}{7}$

Find each product.

37)  $-2\frac{3}{13} \times \frac{5}{4}$

38)  $-3\frac{3}{4} \times 8\frac{7}{10}$

39)  $-\frac{18}{13} \times \frac{7}{13}$

Evaluate each expression.

$$40) \left(6 - \frac{3}{4}\right) \div \frac{9}{5}$$

$$41) \frac{3}{2} \times 5 - \frac{5}{3}$$

$$42) \left(\frac{1}{6} + 1\right) \div \frac{2}{5}$$

$$43) \left(2 + 3\frac{1}{2}\right) \times 3\frac{4}{5}$$

$$44) \left(1\frac{1}{2} - 1\frac{1}{6}\right) \div 2$$

$$45) 2\frac{1}{6} + 3\frac{3}{5} + 4$$

$$46) 1\frac{1}{2} - \left(2\frac{5}{6} - 2\frac{1}{2}\right)$$

$$47) 6 \times 2\frac{1}{3} \times 3\frac{5}{6}$$

$$48) 3\frac{1}{6} + 3\frac{1}{6} - 2\frac{3}{4}$$

$$49) (3.5 - 1.3)^2$$

$$50) 5 + 2.4 \div 2.4$$

$$51) 1.4 \times 4.7 + 2.9$$

Solve each equation.

$$52) \frac{p}{26} = -20$$

$$53) -5 = n + 14$$

$$54) -28 - n = -14$$

$$55) -5p = 60$$

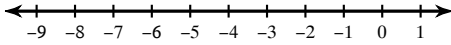
56) A recipe for bread calls for  $3\frac{7}{10}$  cups of flour. John accidentally put in  $5\frac{1}{3}$  cups. How many extra cups did he put in?

57) Stefan will be 64 years old in four years. How old is he now?

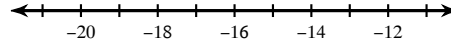
58) If the weight of a package is multiplied by  $\frac{8}{9}$  the result is 24 pounds. Find the weight of the package.

Solve each inequality and graph its solution.

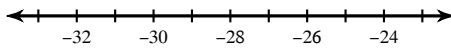
59)  $140 > -28r$



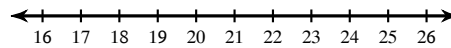
60)  $-44 \geq n + (-30)$



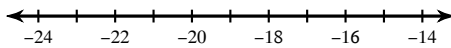
61)  $-9 > x + 19$



62)  $9 + n < 31$



63)  $-23 \geq x + (-2)$



Find the median and mean for each data set.

64)

Age Assumed Office

Senator	Age
Elizabeth Warren	63
Jim Risch	65
Bob Corker	54
Tim Scott	47

Senator	Age
Cory Booker	44
Dianne Feinstein	59
Al Franken	58
Barbara Mikulski	50

Senator	Age
Johnny Isakson	60
Patty Murray	42
Tim Kaine	54
Tom Coburn	56

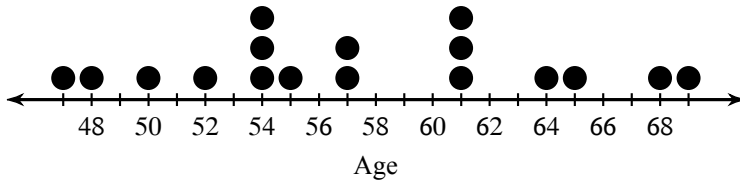
Senator	Age
Joe Manchin	63
Tim Johnson	50
Michael Bennet	44

65)

Hours Slept

6.75    6    7.25    7    7.75    7  
 6.5    7.5    7.75    6.75    6.5    8.5  
 6.25    7.5    7

66) Age of Presidents at Inauguration



67) Large US Cities

City	Population	City	Population	City	Population	City	Population
Oklahoma City	579,999	Columbus	787,033	Colorado Springs	416,427	Nashville	601,222
Charlotte	731,424	Tulsa	391,906	New Orleans	343,829	Chula Vista	243,916
Wichita	382,368	Kansas City	459,787	Lincoln	258,379	Cincinnati	296,943
Boston	617,594	Reno	225,221	Henderson	257,729		

68) Hours Slept

6.75    6.5    5.75    7.75    7.5  
 6.75    5.25    7.25    7.75    7.25  
 5.75    6    7    5.75    6

Draw a dot plot for each data set.

69) # Words in Book Titles

1    1    2    2    3    3    3    3  
 4    4    5

70) Games per World Series

4    4    5    5    6    6    7    7  
 7    7    7

Find the range for each data set.

71) Test Scores

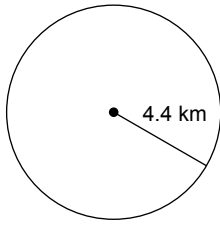
43    44    47    49    49    49    51  
 52    52    54    55

72) Test Scores

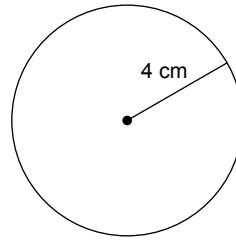
40    41    44    46    47    49    53  
 53    53    55    57

Find the area of each. Round your answer to the nearest tenth.

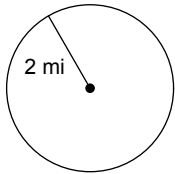
73)



74)

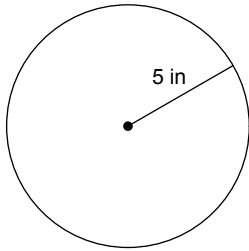


75)

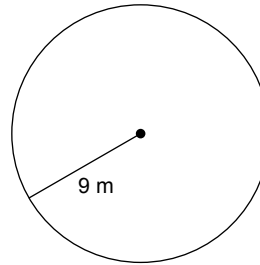


Find the circumference of each circle. Round your answer to the nearest tenth.

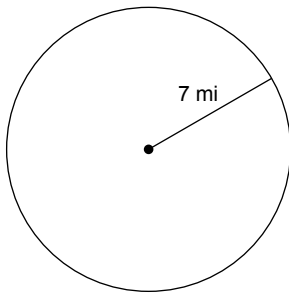
76)



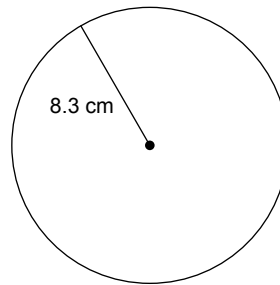
77)



78)

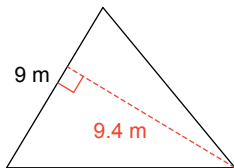


79)

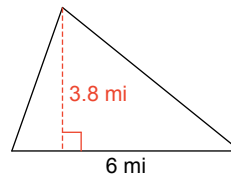


Find the area of each.

80)



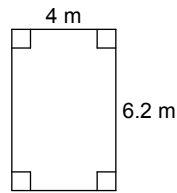
81)



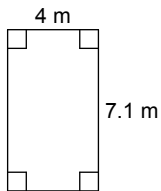
82)



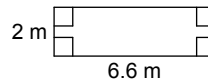
83)



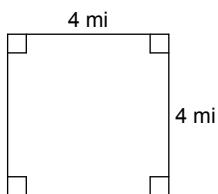
84)



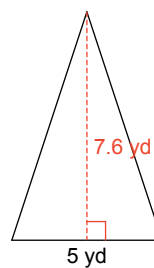
85)



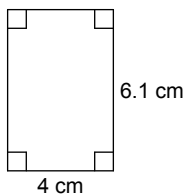
86)



87)



88)



Answer each question and round your answer to the nearest whole number.

89) One bag of yellow onions costs \$2. How many bags of yellow onions can you buy for \$8?

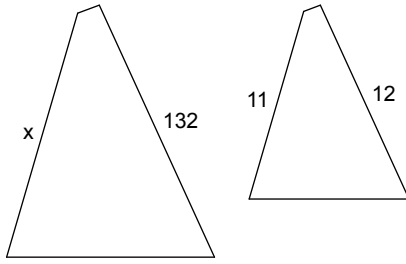
90) One bunch of seedless green grapes costs \$2. How many bunches can you buy for \$4?

91) One package of fresh chives costs \$2. How many packages of fresh chives can you buy for \$10?

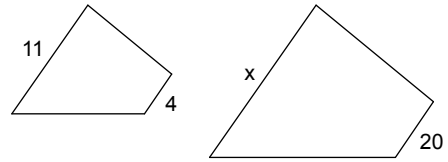
92) If you can buy one bag of radishes for \$2, then how many can you buy with \$4?

Each pair of figures is similar. Find the missing side.

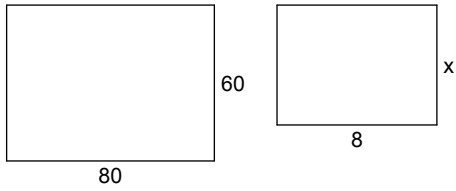
93)



94)



95)



Evaluate each expression.

96)  $4 + (-3)$

97)  $3 - (-7)$

98)  $(-7) - 3$

Round each to the place indicated.

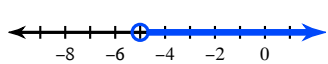
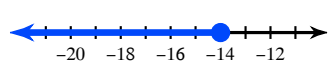
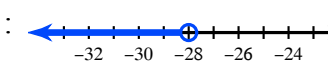
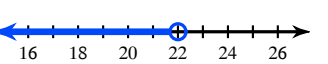
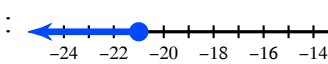
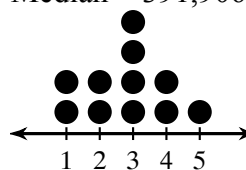
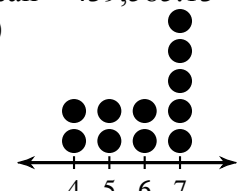
99)  $6.3291$

100)  $6.0396$

101)  $2.96$



## Answers to Summer Review

- |                                  |   |  |  |
|----------------------------------|---|--|--|
| 1) $\{-1.67\}$                   | 2) $\{11.67\}$  | 3) $\{-3.2\}$                              | 4) $\{-1.75\}$   |
| 5) $\{30\}$                      | 6) $\{2.81\}$   | 7) $\{15\}$                                | 8) $\{-15.75\}$  |
| 9) $\{10.8\}$                    | 10) $\{-1.57\}$   | 11) $\frac{1}{2}$                          | 12) 5  |
| 13) $5\frac{1}{3}$               | 14) 9%  | 15) 93%                                    | 16) 80%  |
| 17) 48%                          | 18) 40%   | 19) 31%                                    | 20) 63%  |
| 21) 75%                          | 22) $439\frac{13}{33}\%$  | 23) 850%                                   | 24) 84%  |
| 25) $37\frac{1}{2}\%$            | 26) 92%   | 27) 30%                                    | 28) $5\frac{1}{2}$   |
| 29) $\frac{5}{6}$                | 30) $\frac{48}{275}$  | 31) 44                                     | 32) -6   |
| 33) -76                          | 34) $\frac{49}{145}$  | 35) $\frac{8}{9}$                          | 36) $\frac{28}{61}$  |
| 37) $-2\frac{41}{52}$            | 38) $-32\frac{5}{8}$  | 39) $-\frac{126}{169}$                     | 40) $\frac{35}{12}$  |
| 41) $\frac{35}{6}$               | 42) $\frac{35}{12}$   | 43) $20\frac{9}{10}$                       | 44) $\frac{1}{6}$  |
| 45) $9\frac{23}{30}$             | 46) $1\frac{1}{6}$  | 47) $53\frac{2}{3}$                        | 48) $3\frac{7}{12}$  |
| 49) 4.84                         | 50) 6   | 51) 9.48                                   | 52) $\{-520\}$   |
| 53) $\{-19\}$                    | 54) $\{-14\}$   | 55) $\{-12\}$                              | 56) $1\frac{19}{30}$   |
| 57) 60                           | 58) 27  | 59) $r > -5$ :                             |      |
| 60) $n \leq -14$ :               |        | 61) $x < -28$ :                            |      |
| 62) $n < 22$ :                   |        | 63) $x \leq -21$ :                         |      |
| 64) Median = 54 and Mean = 53.93 | 65) Median = 7 and Mean = 7.07  | 67) Median = 391,906 and Mean = 439,585.13 | 69)  |
| 66) Median = 57 and Mean = 57.47 | 70)  | 68) Median = 6.75 and Mean = 6.6           | 71) 12   |
| 71) 12                           | 72) 17  | 73) 60.8 km <sup>2</sup>                   | 74) 50.3 cm <sup>2</sup>   |
| 75) 12.6 mi <sup>2</sup>         | 76) 31.4 in   | 77) 56.5 m                                 | 78) 44 mi  |
| 79) 52.2 cm                      | 80) 42.3 m <sup>2</sup>   | 81) 11.4 mi <sup>2</sup>                   | 82) 33 mi <sup>2</sup>   |
| 83) 24.8 m <sup>2</sup>          | 84) 28.4 m <sup>2</sup>   | 85) 13.2 m <sup>2</sup>                    | 86) 16 mi <sup>2</sup>   |
| 87) 19 yd <sup>2</sup>           | 88) 24.4 cm <sup>2</sup>  | 89) 4                                      | 90) 2  |
| 91) 5                            | 92) 2   | 93) 121                                    | 94) 55   |
| 95) 6                            | 96) 1   | 97) 10                                     | 98) -10  |
| 99) 6.329                        | 100) 6.040  | 101) 3.0                                   |  |