

**Summer Math Packet****Evaluate each expression.**

1)  $(-2) - 1 - (-4)$

2)  $(-5) - (-5) - (-5)$

3)  $7.1 - (-0.1) - 1.6$

4)  $2 - (-1.5) + (-6.69)$

5)  $\frac{2}{7} - 2\frac{1}{3}$

6)  $\left(-1\frac{1}{4}\right) - \left(-\frac{4}{7}\right)$

7)  $1 - \left(-3\frac{5}{8}\right)$

8)  $(-4) + \left(-\frac{7}{4}\right)$

9)  $(5 \cdot 3) \div 3$

10)  $4 - (6 - 3)$

11) 3 increased by 5

12) 7 more than 3

**Round each to the place indicated.**

13) 5.80

14) 1.4249

**Write the name of each decimal place indicated.**

15) 7.12473

16) 4.08478

**Evaluate each using the values given.**

17)  $b + a + 1$ ; use  $a = 6$ , and  $b = 6$

18)  $h - (j - j)$ ; use  $h = 4$ , and  $j = 4$

**Simplify each expression.**

19)  $-7(4x + 9)$

20)  $-(-7x + 2)$

**Write each as an algebraic expression.**

21)  $n$  squared

22) 2 increased by  $x$

**Write each as a verbal expression.**

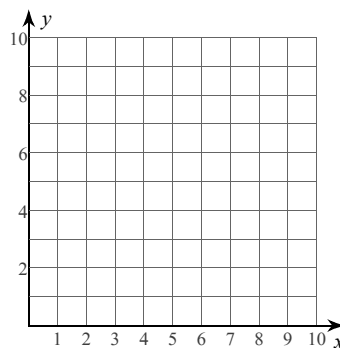
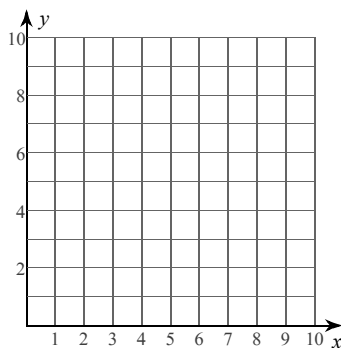
23)  $11 \cdot 11$

24)  $n - 4$

**Plot each point.**

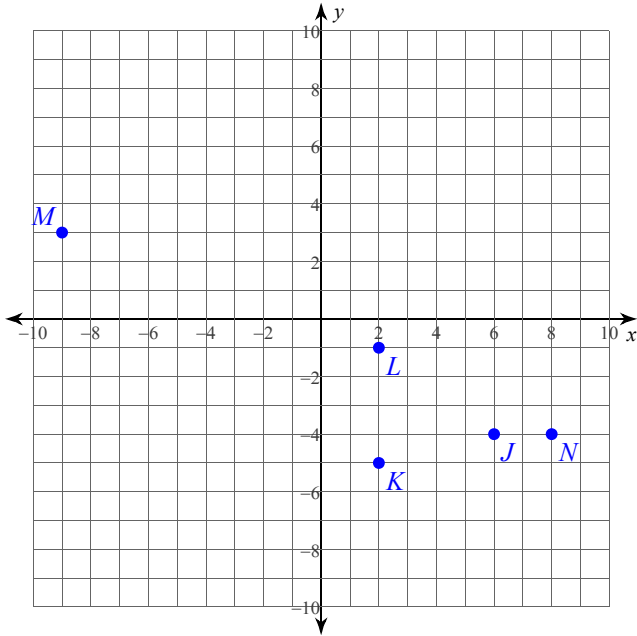
25)  $E(4, 5)$      $F(9, 5)$      $G(7, 8)$   
 $H(10, 3)$      $I(1, 4)$

26)  $D(6, 10)$      $E(7, 4)$      $F(0, 2)$   
 $G(10, 9)$      $H(1, 4)$

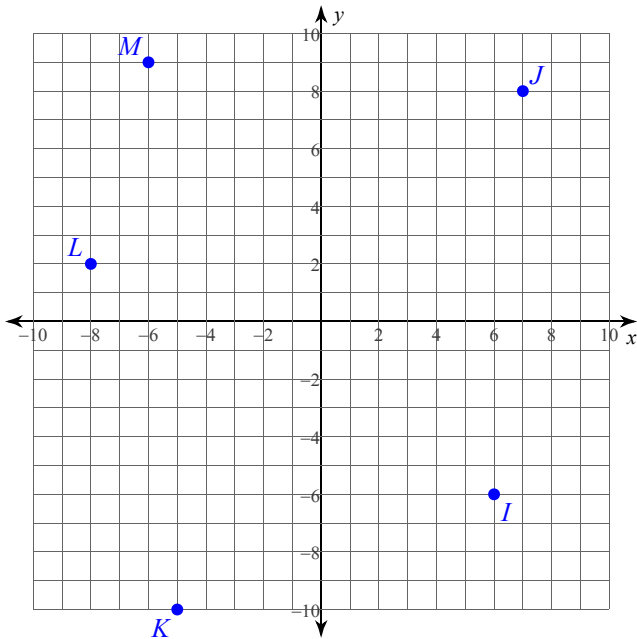


State the coordinates of each point.

27)

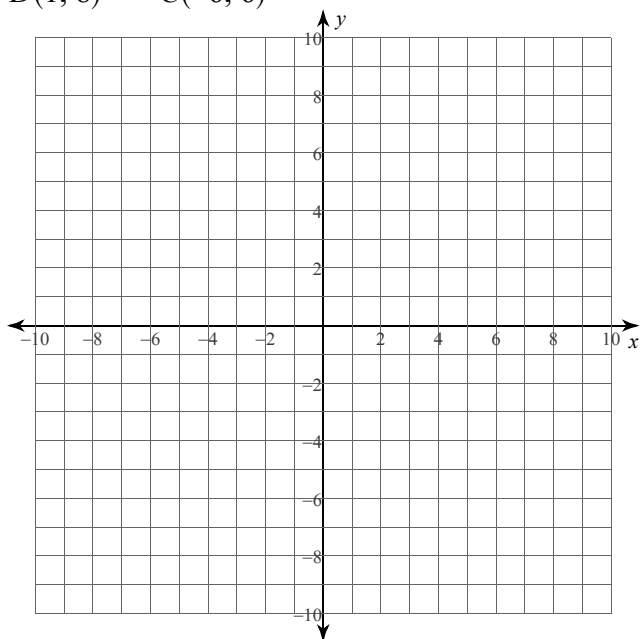


28)

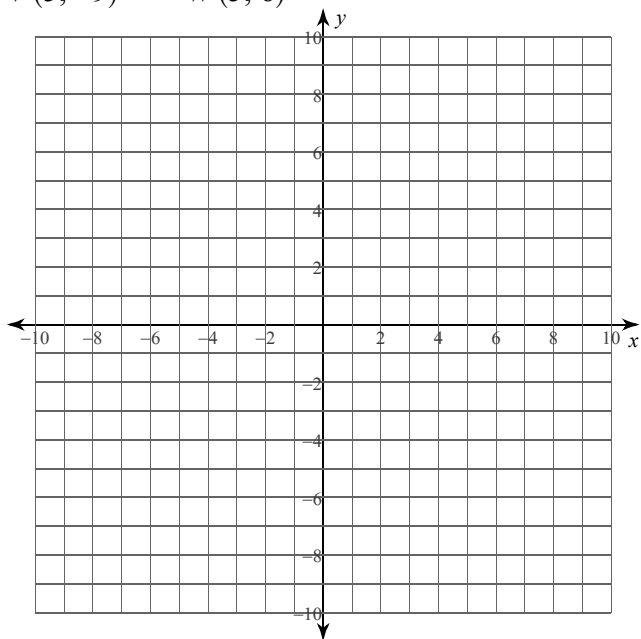


State the quadrant or axis that each point lies in.

- 29)  $G(-5, 7)$     $F(7, 3)$     $E(-4, -1)$   
 $D(1, 8)$     $C(-6, 6)$



- 30)  $S(-2, -10)$     $T(9, -10)$     $U(4, 3)$   
 $V(5, -9)$     $W(5, 6)$



**Solve each equation.**

31)  $-50 = -5 - 5a$

32)  $\frac{b-3}{3} = -5$

33) A wise man once said, "200 reduced by 3 times my age is 50." What is his age?

34) Kali won 87 super bouncy balls playing the bean bag toss at the county fair. At school she gave four to every student in her math class. She only has 7 remaining. How many students are in her class?

**Solve each equation.**

35)  $123 = -3(-1 + 5r)$

36)  $-184 = 8(5m - 3)$

37)  $-3(5x - 7) - 1 = 3x - 34$

38)  $6(1 + 4x) = 8x + 38$

**Solve each equation for the indicated variable.**

39)  $\frac{k}{a} = \frac{v}{w}$ , for  $a$

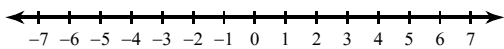
40)  $ma = n + p$ , for  $a$

41)  $\frac{5}{3x} = -\frac{p}{2n}$ , for  $x$

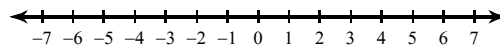
42)  $3x + 4 = 4p - n$ , for  $x$

Draw a graph for each inequality.

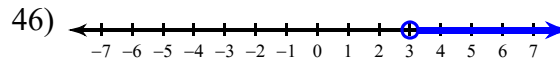
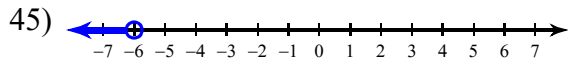
43)  $n > 2$



44)  $x \leq 3$



Write an inequality for each graph.



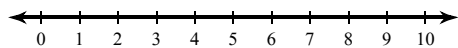
Solve each inequality.

47)  $-5 \leq \frac{2+p}{2}$

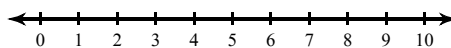
48)  $-10r - 1 < 119$

Solve each inequality and graph its solution.

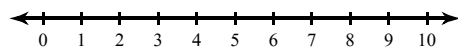
49)  $5b - 5b < -1$



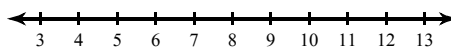
50)  $x + 2 - 5x < -14$



51)  $v - 4v \geq -10 - v$



52)  $4x - 13 > 3x - 5$



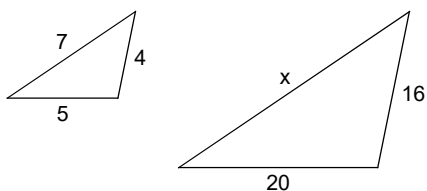
Solve each proportion.

53)  $\frac{3}{n} = \frac{8}{5}$

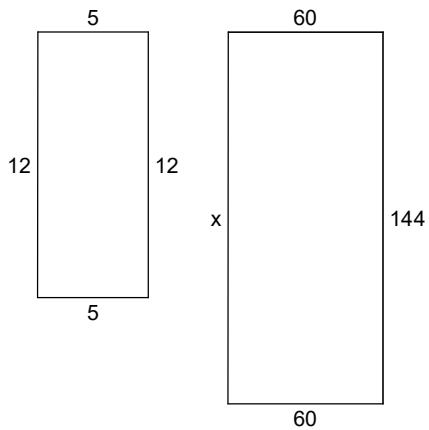
54)  $\frac{x}{4} = \frac{6}{8}$

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

55)



56)



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

57) A model statue has a scale of 1 in : 4 ft. If the model statue is 3 in tall, then how tall is the real statue?

58) An adult giraffe that is 14 ft tall casts a shadow that is 7 ft long. Find the length of the shadow that a 8 ft cardboard box casts.

59) A rectangle is 1 in wide and 3 in tall. If it is enlarged to a height of 6 in, then how wide will it be?

60) Jenny bought one package of fresh chives for \$2. How many packages can Carlos buy if he has \$20?

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

61) 0.4

62) 0.76

**Write each as a percent. Use repeating decimals when necessary.**

63)  $\frac{1}{100}$

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

**Write each as a fraction.**

65) 72%

66) 80%

**Write each as a decimal. Round to the hundredths place.**

67) 6%

68) 90%

**Solve each problem.**

69) 23 is what percent of 33?

70) What percent of 94 is 2?

71) What is 78% of 37?

72) What is 22% of 21?

73) 159.7 is 23% of what?

74) 72 is 52% of what?

**Find the selling price of each item.**

75) Original price of an MP3 player: \$199.50  
Discount: 20%  
Tax: 1%

76) Original price of a car: \$18,000.00  
Discount: 30%  
Tax: 4%

77) Cost of a comic book: \$3.95  
Markup: 30%  
Tax: 4%

78) Cost of a microphone: \$119.50  
Markup: 20%  
Tax: 5%

**Find each percent change. Round to the nearest tenth of a percent. State if it is an increase or decrease.**

79) From 87 tons to 67 tons

80) From 98 minutes to 8 minutes