

Summer assignment, show all calculations. Name _____

© 2016 Kuta Software LLC. All rights reserved.

Evaluate each expression.

1) $(-6) - 8 - 8 + 5$

2) $-\frac{2}{(-6) + (-2)^2}$

3) $-\frac{21 \times 3}{7}$

4) $\frac{(-14) - 2}{10 - 2}$

5) $(-6) + 9 - ((-9) - (-6))$

6) $9 + ((-3) - 6) \times (-7)$

Evaluate each using the values given.

7) $y + y - (y - (x - y))$; use $x = -7$, and $y = 3$

8) $(h)(j - k - (h + h))$; use $h = -4$, $j = -5$, and $k = -7$

9) $pq + \frac{p}{3} - p$; use $p = 9$, and $q = -9$

10) $b - (b + 6a + a)$; use $a = 2$, and $b = 8$

Simplify each expression.

11) $-8p - 5(1 - p)$

12) $1 + 2(x - 4)$

13) $6n + 5(n - 7)$

14) $-6(1 + n) + 3(2n - 4)$

15) $-3(8m - 3) + 4(2m - 6)$

16) $-3(1 - 3b) - 2(7b + 8)$

Solve each equation.

17) $\frac{v}{10} = -9$

18) $14 + x = -8$

19) $-29 = n + (-24)$

20) $-\frac{1}{7} = \frac{p}{28}$

21) $22r = -440$

22) $25x = 50$

23) $-3 = k - -16$

24) $k + -27 = -19$

25) $5b - 2 = 28$

26) $-1 - 8a = -145$

27) $-1 + 7v = 34$

28) $-11 + \frac{x}{15} = -10$

29) $-9 + \frac{n}{3} = -11$

30) $\frac{-2 + b}{18} = -1$

31) $-9 + \frac{r}{8} = -8$

32) $\frac{v - 10}{-3} = 6$

33) Six workers are hired to seed a field by hand. Each is given a plot which is 8×8 feet in size. What is the total area of the field?

34) Darryl won 80 super bouncy balls playing the bean bag toss at the county fair. At school he gave one to every student in his math class. He only has 55 remaining. How many did he give away?

35) Jose spent \$18.10 on five candy bars. How much did each candy bar cost?

- 36) Cody and three of his friends went out to eat. They decided to split the bill evenly. Each person paid \$6.69. What was the total bill?
- 37) Willie spent half of his weekly allowance playing mini-golf. To earn more money his parents let him weed the garden for \$10. What is his weekly allowance if he ended with \$15?
- 38) James won 78 super bouncy balls playing horseshoes at the county fair. At school he gave three to every student in his math class. He only has 9 remaining. How many students are in his class?
- 39) A wise man once said, "400 reduced by 3 times my age is 133." What is his age?
- 40) A wise man once said, "500 reduced by 3 times my age is 257." What is his age?

Solve each proportion.

41) $\frac{2}{a} = -\frac{8}{6}$

42) $\frac{9}{4} = \frac{2}{x}$

43) $\frac{2}{5} = \frac{n}{10}$

44) $-\frac{3}{8} = \frac{r}{3}$

45) $-\frac{2}{3} = \frac{10}{r}$

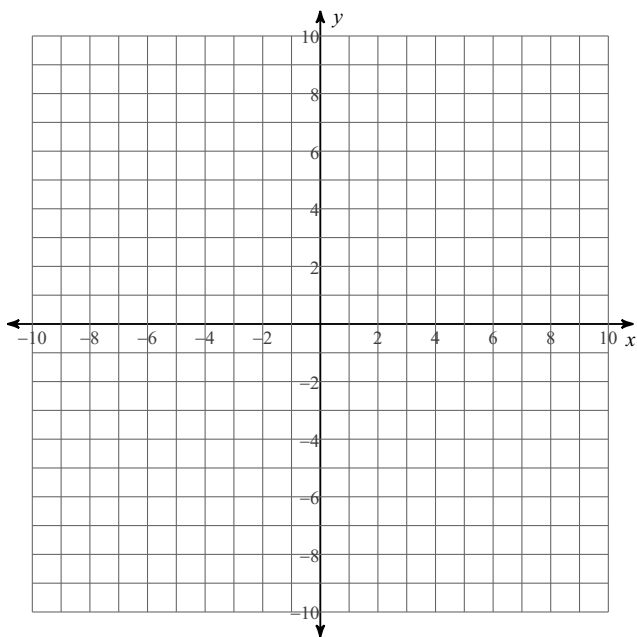
46) $-\frac{9}{2n} = -\frac{5}{7}$

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

- 47) Ndiba reduced the size of a painting to a width of 1 in. What is the new height if it was originally 5 in wide and 20 in tall?
- 48) Lisa took a trip to Kuwait. Upon leaving she decided to convert all of her Dinars back into dollars. How many dollars did she receive if she exchanged 13 Dinars at a rate of 1 Dinar for every \$3?
- 49) Willie bought one bunch of asparagus for \$2. How many bunches of asparagus can Daniel buy if he has \$12?
- 50) One bag of carrots costs \$3. How many bags of carrots can you buy for \$9?

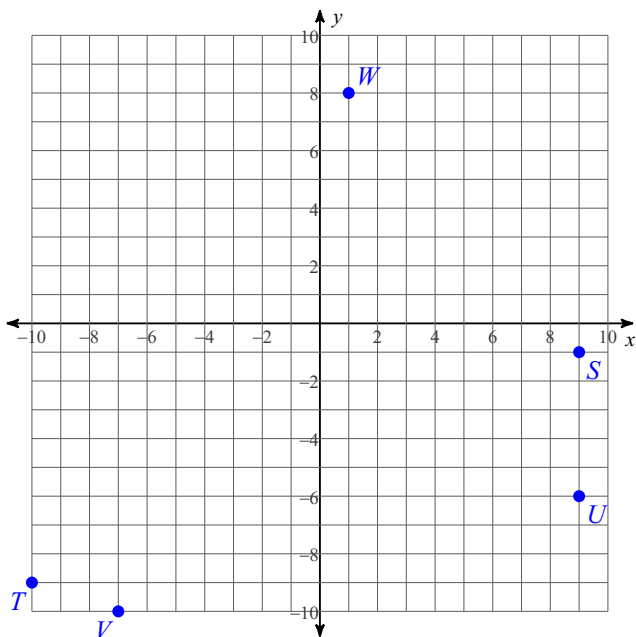
Plot each point.

- 51) $D(-6, 0)$ $E(-5, 3)$ $F(-9, -2)$
 $G(-6, -2)$ $H(-10, -3)$



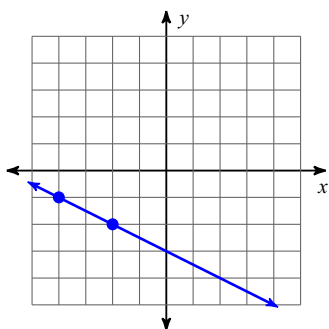
State the coordinates of each point.

52)

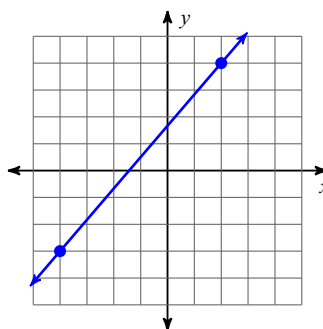


Find the slope of each line.

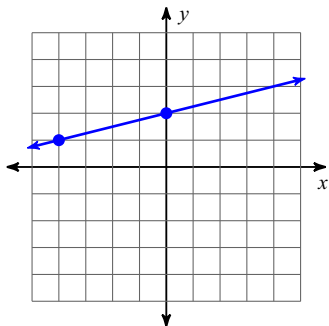
53)



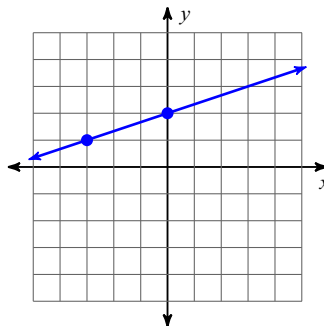
54)



55)



56)



57) $3x - 45 - 15y = 0$

58) $-y = x$

59) $0 = -2y + 2 - x$

60) $7x = -4y - 16$

Write the slope-intercept form of the equation of each line given the slope and y-intercept.

61) Slope = 3, y-intercept = -2

62) Slope = $\frac{4}{5}$, y-intercept = 4

63) Slope = $-\frac{7}{4}$, y-intercept = -3

64) Slope = $-\frac{3}{4}$, y-intercept = -2

Find each square root.

65) $\sqrt{36}$

66) $\sqrt{49}$

67) $\sqrt{121}$

68) $\sqrt{16}$

Find each square root. Round to the nearest whole number.

69) $\sqrt{78}$

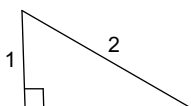
70) $\sqrt{139}$

71) $\sqrt{199}$

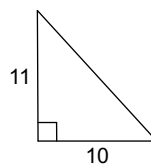
72) $\sqrt{51}$

Find each missing length to the nearest tenth.

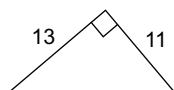
73)



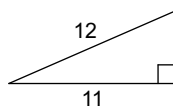
74)



75)



76)



Find the distance between each pair of points.

77) $(-4, -8), (-3, 4)$

78) $(2, -5), (3, -7)$

79) $(-3, 5), (1, 1)$

80) $(-2, -2), (-5, 2)$