

**www.alvarezmathhelp.com****MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.****Simplify.**

1)  $\frac{193 + 7}{3^2 - 4}$  1) \_\_\_\_\_

- A) 40                      B) 100                      C) 60                      D) 38

Objective: (1.7) Use Order of Operations  
m50-1**Solve the equation.**

2)  $f + 1 = -2$  2) \_\_\_\_\_

- A) -3                      B) 3                      C) -1                      D) 1

Objective: (2.6) Use the Addition Property of Equality to Solve Equations  
m50-2**Simplify the expression.**

3)  $2(4x + 2) + 3(x + 4)$  3) \_\_\_\_\_

- A)
- $11x + 16$
- B)
- $11x + 6$
- C)
- $14x + 16$
- D)
- $24x$

Objective: (3.1) Simplify Expressions by Multiplying and Then Combining Like Terms  
m50-3**Solve the equation.**

4)  $5x + 4 = 49$  4) \_\_\_\_\_

- A) 9                      B) 40                      C) 44                      D) 5

Objective: (3.2) Use Both Properties to Solve Equations  
m50-4

5)  $2(5x - 2) = 8x$  5) \_\_\_\_\_

- A) 2                      B) -2                      C) -1                      D) 1

Objective: (3.2) Use Both Properties to Solve Equations  
m50-5

6)  $5x - 6 = 2x - 30$  6) \_\_\_\_\_

- A) -8                      B) 8                      C) -10                      D) 10

Objective: (3.3) Solve Linear Equations Using the Addition and Multiplication Properties  
m50-6**Solve.**

7)  $\frac{x}{5} = \frac{x}{6} + \frac{2}{5}$  7) \_\_\_\_\_

- A) 12                      B)
- $-\frac{2}{5}$
- C) 0                      D)
- $\frac{1}{12}$

Objective: (4.8) Solve Equations Containing Fractions  
m50-7

**Solve the equation.**

8)  $1.1x + 4.3 = 0.7x + 1.14$

A) -7.9

B) -7.8

C) 0.127

D) -7.11

8) \_\_\_\_\_

Objective: (5.6) Solve Equations Containing Decimals  
m50-8

**Find the median. If necessary, round to one decimal place.**

9) 4, 6, 25, 23, 43, 47

A) 24

B) 23

C) 21.5

D) 25

9) \_\_\_\_\_

Objective: (5.7) Find the Median of a List of Numbers  
m50-9

**Translate to an equation and solve.**

10) 19 is 4% of what number?

A) 475

B) 4750

C) 47.5

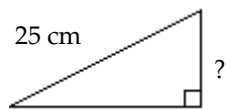
D) 76

10) \_\_\_\_\_

Objective: (6.3) Solve Percent Problems  
m50-10

**Find the unknown length in the right triangle. If necessary, approximate the length to the nearest thousandth.**

11)



24 cm

A) 7 cm

B) 1 cm

C) 9.322 cm

D) 3.678 cm

11) \_\_\_\_\_

Objective: (7.3) Use the Pythagorean Theorem  
m50-11

**Find the probability of the event if a single choice is made from a bag.**

12) A bag contains 7 red marbles, 2 blue marbles, and 1 green marble. What is the probability of choosing a marble that is not blue when one marble is drawn from the bag?

A)  $\frac{4}{5}$

B)  $\frac{5}{4}$

C)  $\frac{1}{5}$

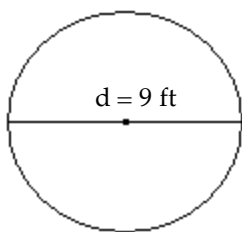
D) 8

12) \_\_\_\_\_

Objective: (7.5) Find the Probability of an Event  
m5012

**Find the area of the geometric figure.**

13)



Use 3.14 for  $\pi$ .

A) 63.585 sq ft

B) 254.34 sq ft

C) 127.17 sq ft

D) 56.52 sq ft

13) \_\_\_\_\_

Objective: (8.3) Find the Area of Plane Regions  
m50-13

Solve the equation.

14)  $8x - (4x - 1) = 2$

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

B)  $\frac{1}{12}$

C)  $-\frac{1}{4}$

D)  $-\frac{1}{12}$

14) \_\_\_\_\_

Objective: (9.3) Apply the General Strategy for Solving a Linear Equation

m50-14

15)  $\frac{5}{6}x + \frac{4}{3} = \frac{2}{3}x$

A) -8

B) 8

C) -12

D) 12

15) \_\_\_\_\_

Objective: (9.3) Solve Equations Containing Fractions or Decimals

m50-15

16)  $9x + 5 - 9x - 5 = 6x - 6x - 3$

A) 0

B) -288

C) all real numbers

D) no solution

16) \_\_\_\_\_

Objective: (9.3) Recognize Identities and Equations with No Solution

m50-16

17)  $2(x + 5) = (2x + 10)$

A) 20

B) 0

C) all real numbers

D) no solution

17) \_\_\_\_\_

Objective: (9.3) Recognize Identities and Equations with No Solution

m50-17

Solve the equation for the indicated variable.

18)  $A = P + PRT$  for T

A)  $T = \frac{A - P}{PR}$

B)  $T = \frac{P - A}{PR}$

C)  $T = \frac{A}{R}$

D)  $T = \frac{PR}{A - P}$

18) \_\_\_\_\_

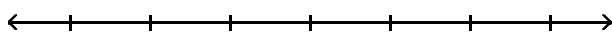
Objective: (9.5) Solve a Formula or Equation for One of Its Variables

m50-18

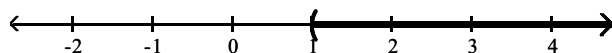
Solve the inequality. Graph the solution set and write it in interval notation.

19)  $21x + 9 > 3(6x + 4)$

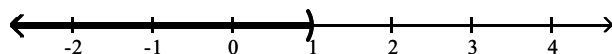
19) \_\_\_\_\_



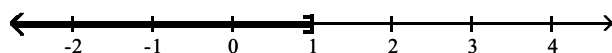
A)  $(1, \infty)$



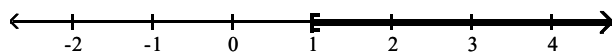
B)  $(-\infty, 1)$



C)  $(-\infty, 1]$



D)  $[1, \infty)$



Objective: (9.6) Use Both Properties to Solve Inequalities

m50-19

Determine whether the ordered pair is a solution of the given linear equation.

20)  $-2y + 3x = -15$ ;  $(5, 0)$

20) \_\_\_\_\_

A) no

B) yes

Objective: (10.1) Determine whether an ordered pair is a solution of an equation in two variables.

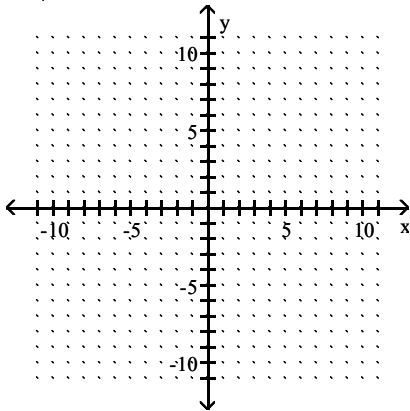
m50-20

Find three ordered pair solutions by completing the table. Then use the ordered pairs to graph the equation.

21)  $y = 2x + 4$

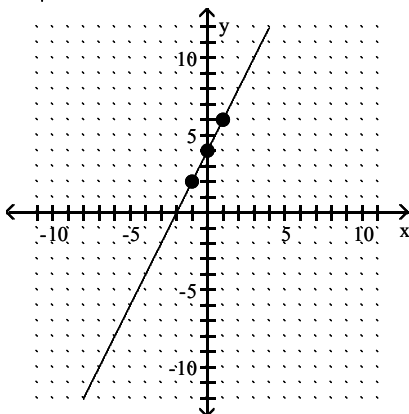
21) \_\_\_\_\_

x	y
0	
1	
-1	



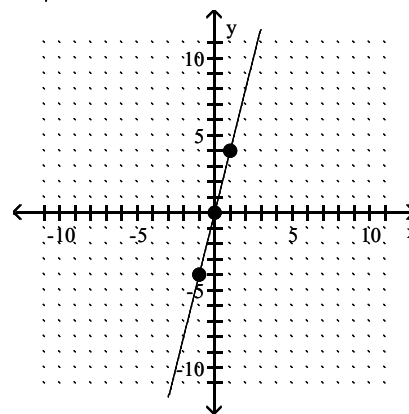
A)

x	y
0	4
1	6
-1	2



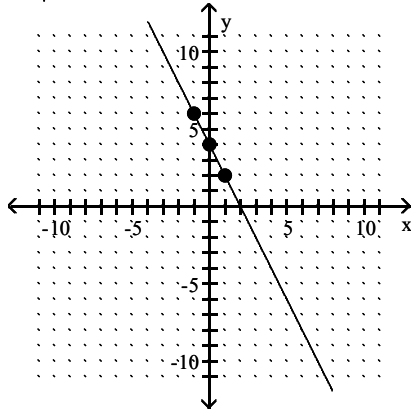
B)

x	y
0	0
1	4
-1	-4



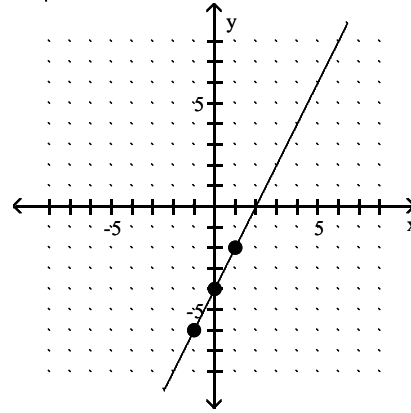
C)

x	y
0	4
1	2
-1	6



D)

x	y
0	-4
1	-2
-1	-6

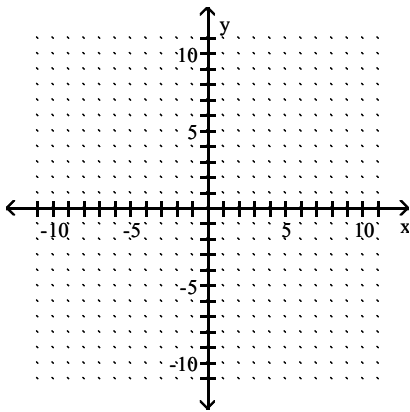


Objective: (10.2) Graph a linear equation by finding and plotting ordered pair solutions.  
m50-21

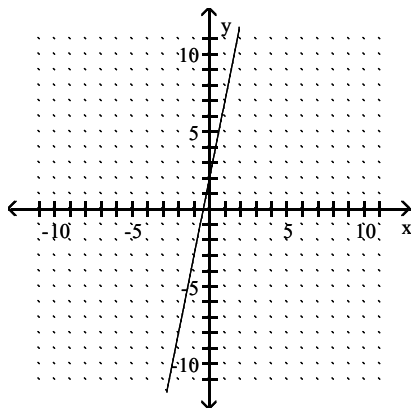
Graph the linear equation.

22)  $5y - 25x = 10$

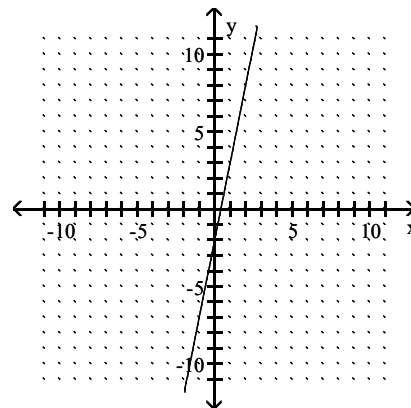
22) \_\_\_\_\_



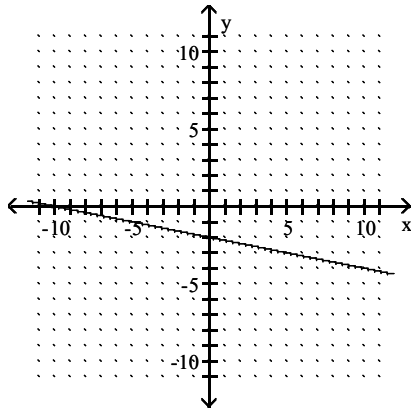
A)



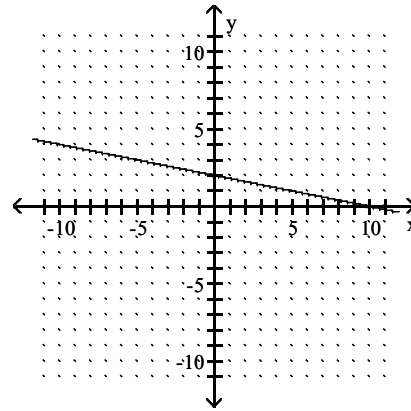
B)



C)



D)



Objective: (10.2) Graph a linear equation by finding and plotting ordered pair solutions.

m50-22

Find the slope of the line that passes through the given points.

23) (8, 5) and (6, 9)

A) -2

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

C) 1

D) 2

23) \_\_\_\_\_

Objective: (10.4) Find the slope of a line given two points of the line.

m50-23

Find an equation of the line described. Write the equation in slope-intercept form if possible.

24) Slope 2, through (5, 2)

A)  $y = 2x - 8$

B)  $y = 2x + 8$

C)  $x = 2y - 8$

D)  $x = 2y + 8$

24) \_\_\_\_\_

Objective: (10.5) Use the point-slope form to find an equation of a line given its slope and a point of the line.

m50-24

Evaluate the function.

25) Find  $f(4)$  when  $f(x) = x^2 + 4x - 3$ .

A) 29

B) 35

C) 3

D) -3

25) \_\_\_\_\_

Objective: (10.6) Use function notation.

m50-25

## Answer Key

Testname: AAFM041024350MT1

- 1) A
- 2) A
- 3) A
- 4) A
- 5) A
- 6) A
- 7) A
- 8) A
- 9) A
- 10) A
- 11) A
- 12) A
- 13) A
- 14) A
- 15) A
- 16) D
- 17) C
- 18) A
- 19) A
- 20) A
- 21) A
- 22) A
- 23) A
- 24) A
- 25) A