

Exam #1 a w

Name \_\_\_\_\_

math0410 Exam #1 04041700aafm041024350m

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**SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.**

**Simplify.**

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

1) \_\_\_\_\_

m50-1

**Solve the equation.**

2)  $f + 1 = -2$

2) \_\_\_\_\_

m50-2

**Simplify the expression.**

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

3) \_\_\_\_\_

m50-3

**Solve the equation.**

4)  $5x + 4 = 49$

4) \_\_\_\_\_

m50-4

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

5) \_\_\_\_\_

m50-5  
6)  $5x - 6 = 2x - 30$

6) \_\_\_\_\_

m50-6  
**Solve.**  
7)  $\frac{x}{5} = \frac{x}{6} + \frac{2}{5}$

7) \_\_\_\_\_

m50-7  
**Solve the equation.**  
8)  $1.1x + 4.3 = 0.7x + 1.14$

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

m50-8  
**Find the median. If necessary, round to one decimal place.**  
9) 4, 6, 25, 23, 43, 47

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

m50-9  
**Translate to an equation and solve.**  
10) 19 is 4% of what number?

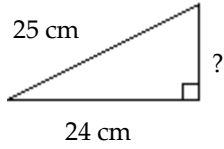
10) \_\_\_\_\_

m50-10

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

11)

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



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?

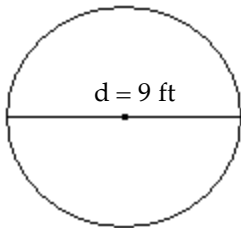
12) \_\_\_\_\_

m5012

Find the area of the geometric figure.

13)

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



Use 3.14 for  $\pi$ .

m50-13

Solve the equation.

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

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

m50-14

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

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

m50-15

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

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

m50-16

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

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

m50-17

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

$$18) A = P + PrT \quad \text{for } T$$

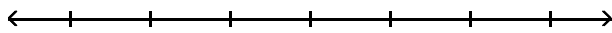
18) \_\_\_\_\_

m50-18

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

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

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



m50-19

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

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

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

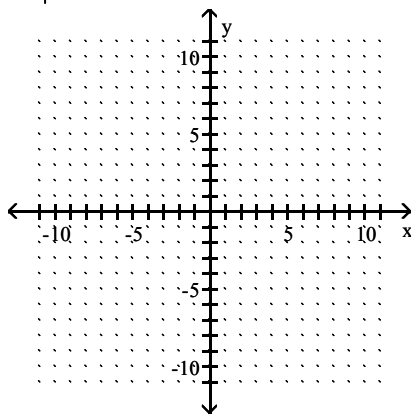
m50-20

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

21)  $y = 2x + 4$

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

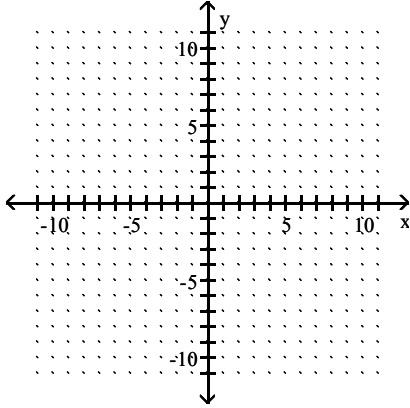
x	y
0	
1	
-1	



m50-21

**Graph the linear equation.**

22)  $5y - 25x = 10$



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

m50-22

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

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

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

m50-23

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

24) Slope 2, through (5, 2)

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

m50-24

**Evaluate the function.**

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

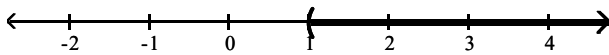
25) \_\_\_\_\_

m50-25

Answer Key

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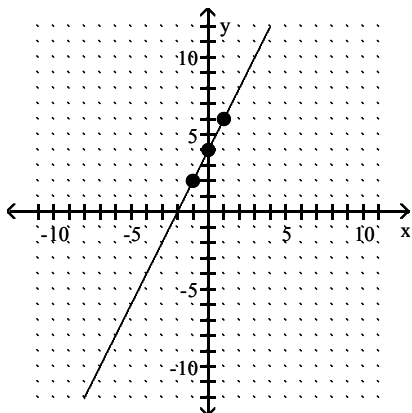
- 1) 40
- 2) -3
- 3)  $11x + 16$
- 4) 9
- 5) 2
- 6) -8
- 7) 12
- 8) -7.9
- 9) 24
- 10) 475
- 11) 7 cm
- 12)  $\frac{4}{5}$
- 13) 63.585 sq ft
- 14)  $\frac{1}{4}$
- 15) -8
- 16) no solution
- 17) all real numbers
- 18)  $T = \frac{A - P}{PR}$
- 19)  $(1, \infty)$



20) no

21)

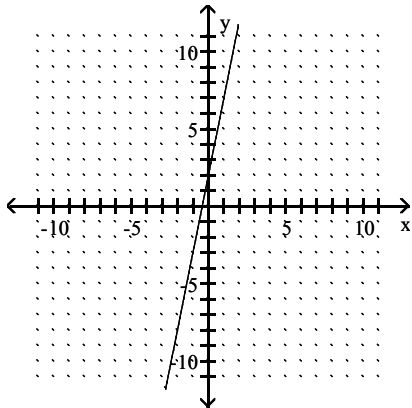
x	y
0	4
1	6
-1	2



Answer Key

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22)



23) - 2

24)  $y = 2x - 8$

25) 29