

Print Name _____

MULTIPLE CHOICE. Choose the answer that best completes the statement or answers the question. Write your choice on the blank provided to the right. Also, fill in your scantron answer sheet. There is only one correct answer per question. You may write on this paper. If a question appears to not have instructions, the instructions for the previous question apply. Good luck.

Find the slope of the line.

1) $5x + y = 11$

1) _____

A) $m = -\frac{1}{5}$

B) $m = 5$

C) $m = -5$

D) $m = \frac{5}{11}$

2) $y = -5x - 4$

2) _____

A) $m = -5$

B) $m = -\frac{1}{5}$

C) $m = 5$

D) $m = -4$

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

3) $5x + 3y = 3$; $(0, -1)$

3) _____

A) yes

B) no

Find the domain of the function.

4) $f(x) = -8x + 7$

4) _____

A) $(-\infty, 7) \cup (7, \infty)$

B) $(-\infty, \infty)$

C) $[\frac{7}{8}, \infty)$

D) $(-\infty, -8) \cup (-8, \infty)$

Find an equation of the line described.

5) With undefined slope, through $\left(-\frac{5}{6}, 8\right)$

5) _____

A) $-\frac{5}{6}x + 8y = 0$

B) $y = 8$

C) $x = -\frac{5}{6}$

D) $-\frac{5}{6}x + y = 8$

Solve.

6) An inclined walkway leading to a new building is to rise 1 inches for each horizontal distance of 17 feet. Write this slope as a grade. (Round to the nearest tenth of a percent if necessary.) 6) _____

A) 1700%

B) 0.5%

C) 20,400%

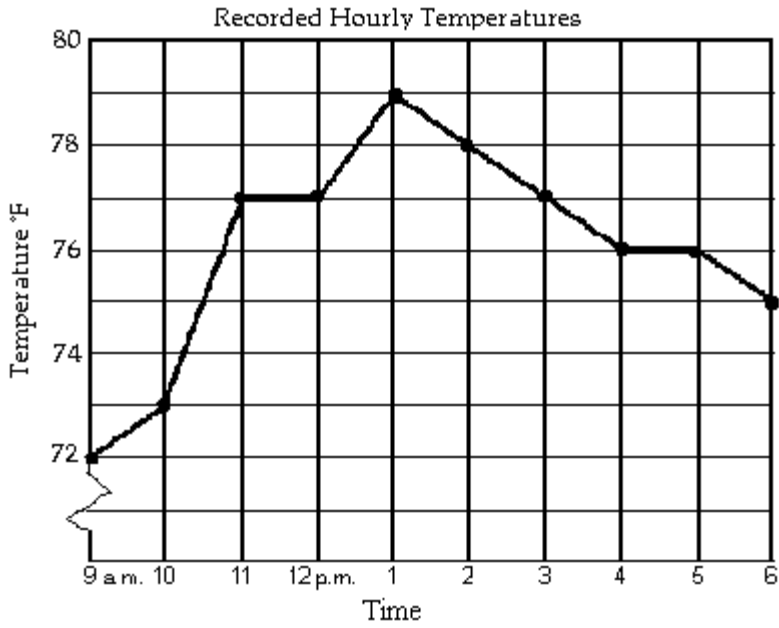
D) 5.9%

Fill in the blank with the correct word or phrase.

7) The horizontal number line in the rectangular coordinate system is called the _____ . 7) _____

- A) x-axis
- B) x-intercept
- C) y-intercept
- D) y-axis

The line graph shows the recorded hourly temperatures in degrees Fahrenheit at an airport. Use the graph to answer the question.



8) At what time was the temperature 73°?

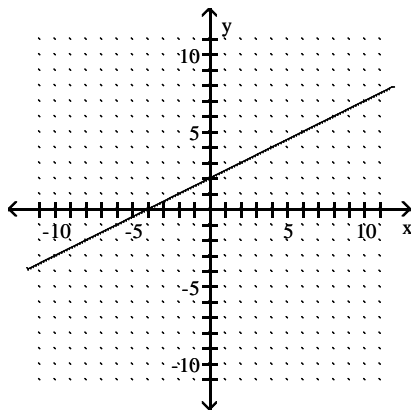
8) _____

- A) 9 a.m.
- B) 5 p.m.
- C) 10 a.m.
- D) 10 a.m. and 11 a.m.

Find the slope of the line if it exists.

9)

9) _____



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

B) 2

C) -2

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

Solve. Assume the exercise describes a linear relationship.

10) An investment is worth \$2162 in 2007. By 2011 it has grown to \$3810. Let y be the value of the investment in the year x , where $x = 0$ represents 2007. Write a linear equation that models the value of the investment in the year x .

10) _____

A) $y = -412x + 5458$

B) $y = -412x + 2162$

C) $y = \frac{1}{412}x + 2162$

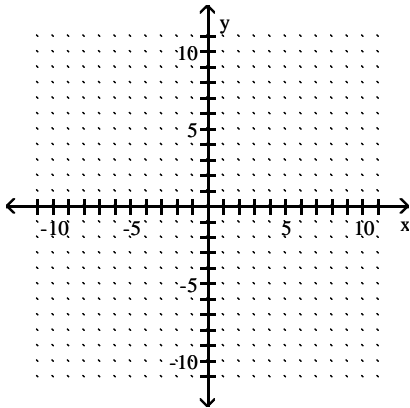
D) $y = 412x + 2162$

SHORT ANSWER. Answer the question, including units in your answer if needed. Show work and circle your final answer.

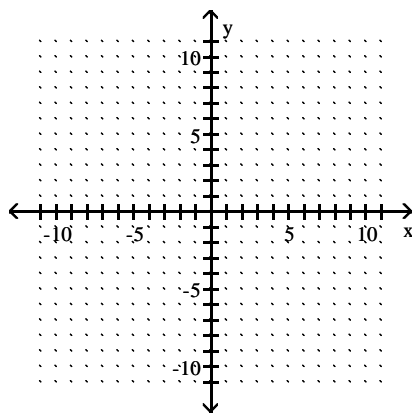
Graph the linear equation.

11) $y = 3x$

11) _____



12) $x = 8$



12) _____

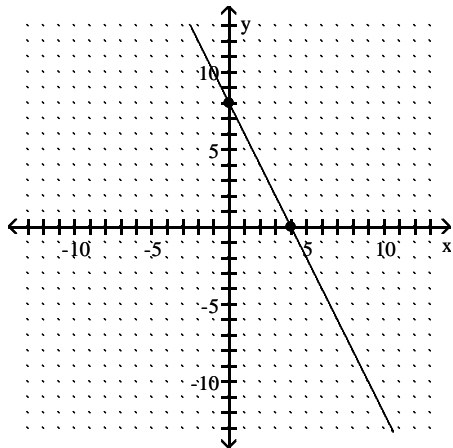
Solve. Assume the exercise describes a linear relationship.

13) In a certain city, the cost of a taxi ride is computed as follows: There is a fixed charge of \$2.50 as soon as you get in the taxi, to which a charge of \$2.10 per mile is added. Find an equation that can be used to determine the cost of an x -mile taxi ride. Use this equation to find the cost of a 3-mile taxi ride.

13) _____

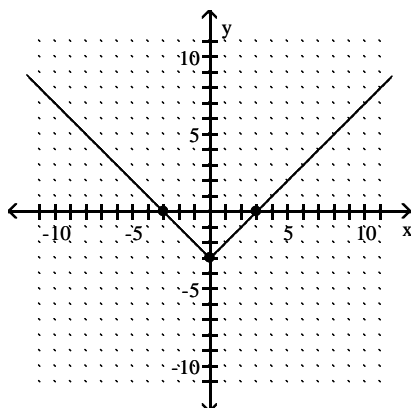
Identify the intercepts.

14)



14) _____

15)

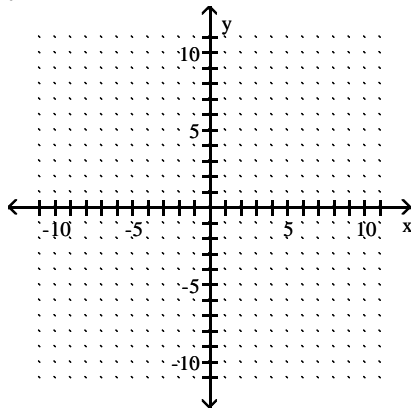


15) _____

Graph the linear equation by finding and plotting its intercepts.

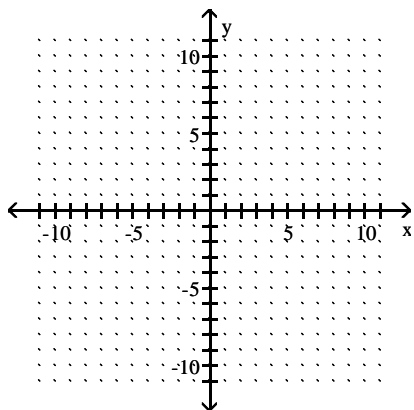
16) $y = 3x + 9$

16) _____



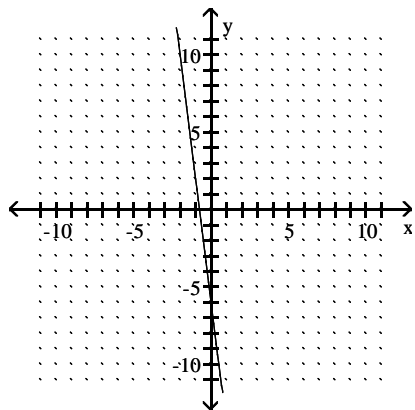
17) $y = \frac{5}{4}x - 1$

17) _____



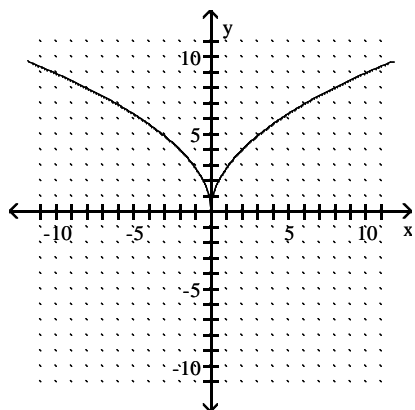
Determine whether the graph is the graph of a function.

18)



18) _____

19)



19) _____

Evaluate the function.

20) Find $f(0)$ when $f(x) = x^2 + 5x - 4$.

20) _____

Answer Key

Testname: 112_GRPREVASS_CH3_FALL15

1) C

Objective: (3.4) Find the slope of a line given its equation.

2) A

Objective: (3.4) Find the slope of a line given its equation.

3) B

Objective: (3.1) Determine whether an ordered pair is a solution of an equation in two variables.

4) B

Objective: (3.6) Use function notation.

5) C

Objective: (3.5) Find equations of vertical and horizontal lines.

6) B

Objective: (3.4) Use slope as a rate of change.

7) A

Objective: (3.7) Vocabulary Check

8) C

Objective: (3.1) Read bar and line graphs.

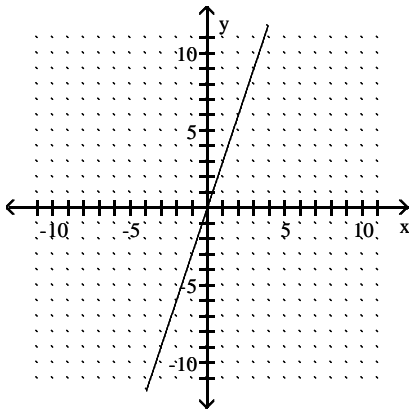
9) D

Objective: (3.4) Describe the slope of a graph.

10) D

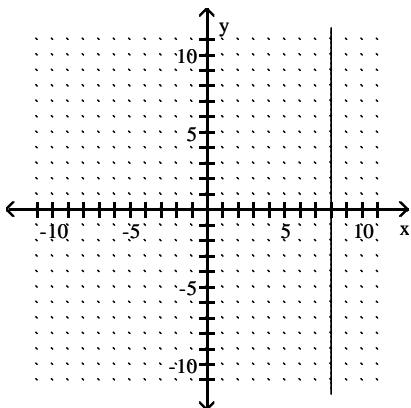
Objective: (3.5) Use the point-slope form to solve problems.

11)



Objective: (3.2) Graph a linear equation by finding and plotting ordered pair solutions.

12)



Objective: (3.2) Graph a linear equation by finding and plotting ordered pair solutions.

Answer Key

Testname: 112_GRPREVASS_CH3_FALL15

13) \$8.80

Objective: (3.5) Use the point-slope form to solve problems.

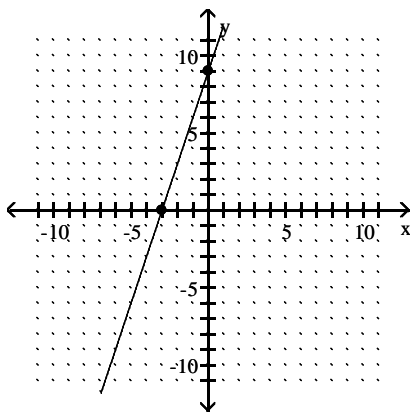
14) (4, 0), (0, 8)

Objective: (3.3) Identify intercepts of a graph.

15) (3, 0), (-3, 0), (0, -3)

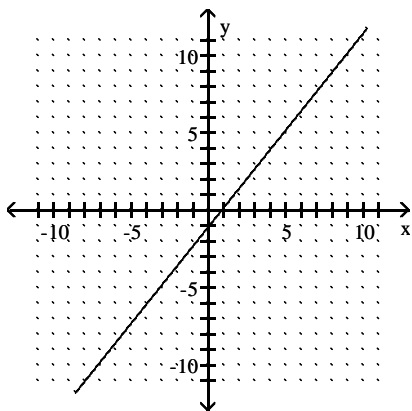
Objective: (3.3) Identify intercepts of a graph.

16)



Objective: (3.3) Graph a linear equation by finding and plotting intercepts.

17)



Objective: (3.3) Graph a linear equation by finding and plotting intercepts.

18) yes

Objective: (3.6) Use the vertical line test.

19) yes

Objective: (3.6) Use the vertical line test.

20) -4

Objective: (3.6) Use function notation.