

Name _____

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

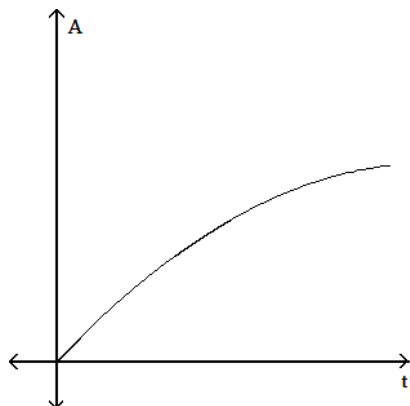
Solve the problem.

- 1) Find the graph that matches the scenario: The rain fell more and more softly.

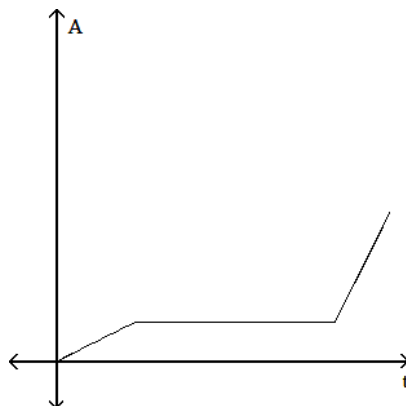
1) _____

Let A represent the amount of rain (in inches) that has fallen in t hours.

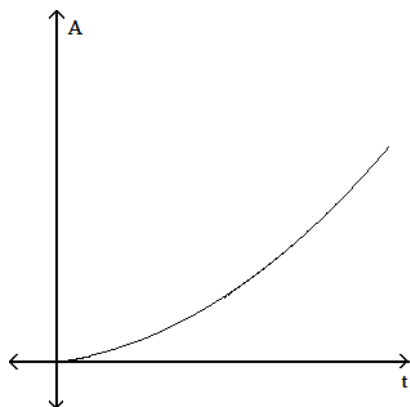
A)



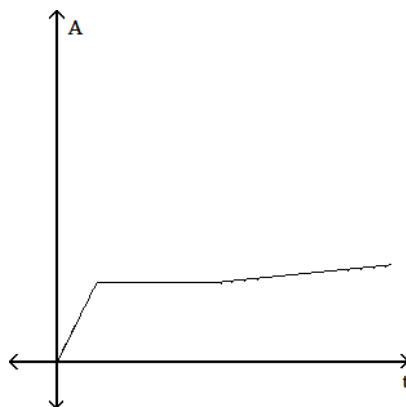
B)



C)

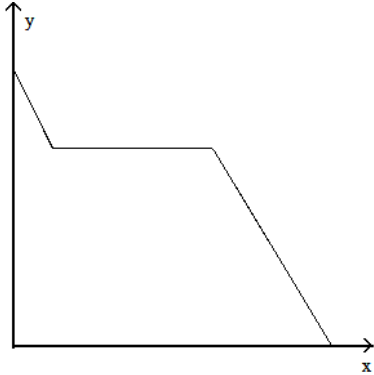


D)



- 2) Jim lowers his hot-air balloon by gradually releasing air from the balloon. Let y represent the height of Jim's balloon (in feet) x minutes after he began releasing air from the balloon. Match the correct scenario with the following graph.

2) _____

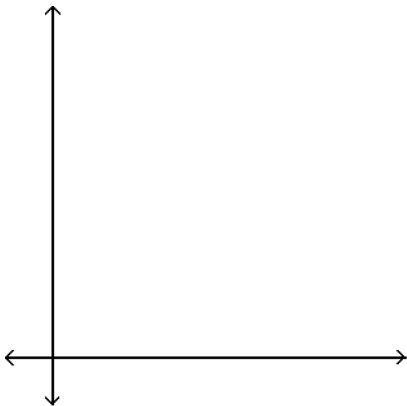


- A) Jim released air from the balloon for some time, then stopped to enjoy the countryside, and finally decided to land.
- B) Jim spent hours enjoying the countryside without lowering the balloon, before deciding to land.
- C) Jim enjoyed the countryside without lowering the balloon. He decided then to lower the balloon, and stayed at this height for a while. Then he decided to land.
- D) Jim kept releasing air from the balloon and landed.

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

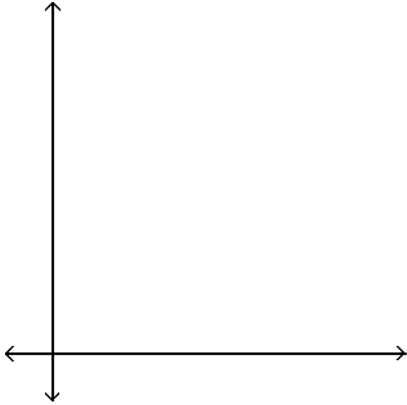
- 3) Let F represent the amount of student financial aid (in dollars) for which a student qualifies if the student earns E dollars in a year. Sketch a qualitative graph that describes the variables E and F .

3) _____



- 4) A person puts some warm turkey leftovers in the refrigerator. Let T represent the temperature of the turkey at M minutes after putting the turkey in the refrigerator. Sketch a qualitative graph that describes the relationship between M and T .

4) _____



MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

Identify the independent variable and the dependent variable.

- 5) Let c be the total cost (in dollars) of n notebooks.

5) _____

A) n independent, c dependent

B) c independent, n dependent

- 6) Let F be the temperature (in degrees Fahrenheit) of an oven, and let T be the number of minutes it takes to bake brownies.

6) _____

A) F independent, T dependent

B) T independent, F dependent

- 7) Let P be the percentage of people who own a house and whose income is I dollars.

7) _____

A) I independent, P dependent

B) P independent, I dependent

- 8) Let A be the age (in years) of a car, and let c be the annual cost of maintenance (in dollars) for the car.

8) _____

A) c independent, A dependent

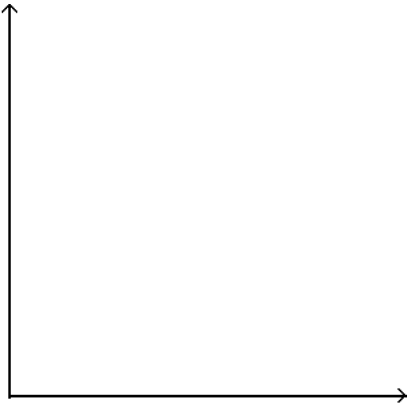
B) A independent, c dependent

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

Sketch a graph that shows the relationship between the variables defined.

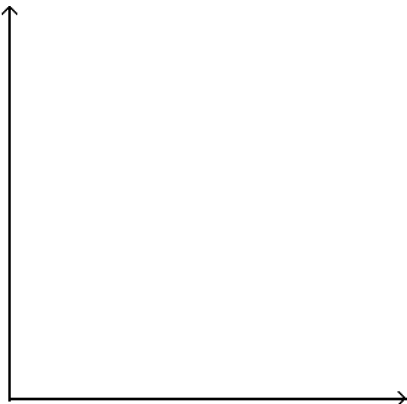
9) Let m be the shoe size of a person at age a years.

9) _____



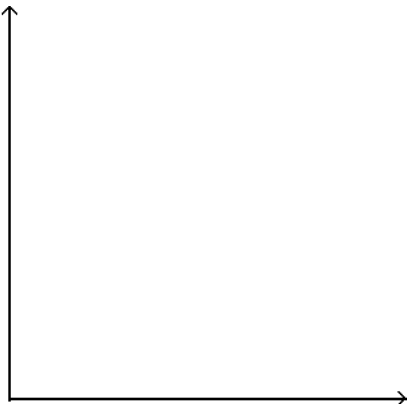
10) A hot air balloon flew from Seattle, WA to Olympia, WA. Let a be the altitude (in feet) of the hot air balloon t minutes after take off.

10) _____



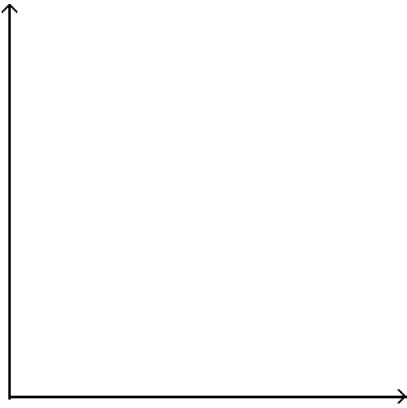
11) Let n be the number of people willing to buy a video game at a price of p dollars.

11) _____



12) Let V be the volume of a right circular cylinder with a fixed height whose radius is r (in inches).

12) _____

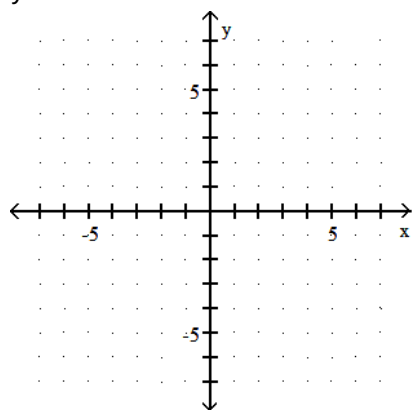


MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

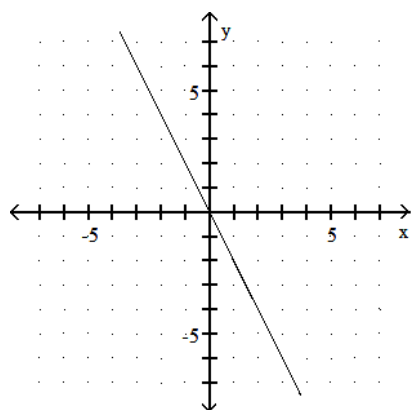
Sketch the graph of the equation.

13) $y = -2x$

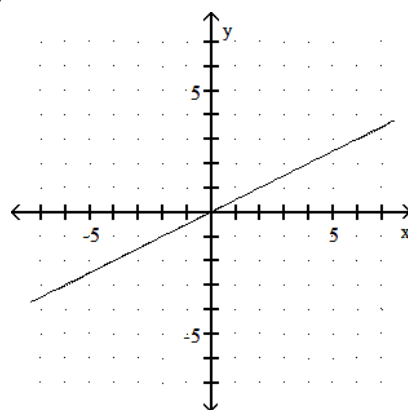
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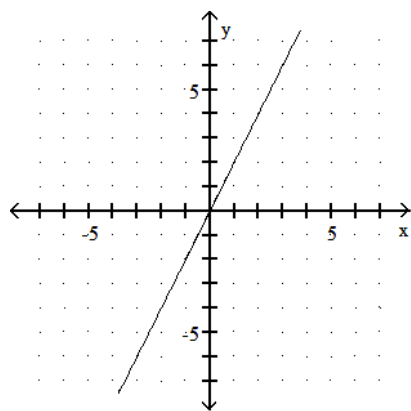
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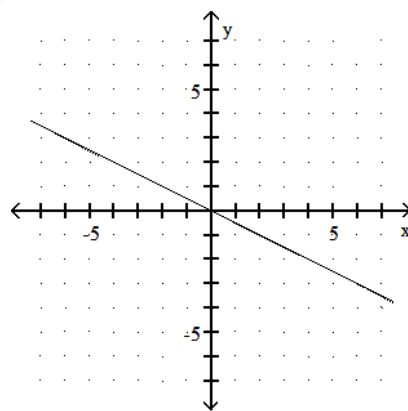
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C)

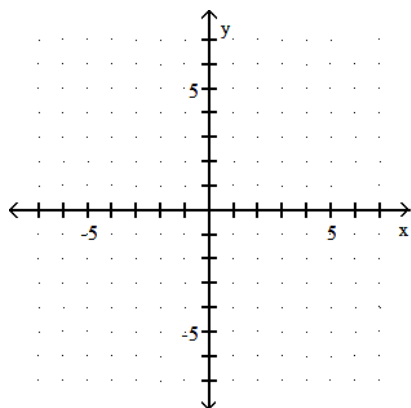


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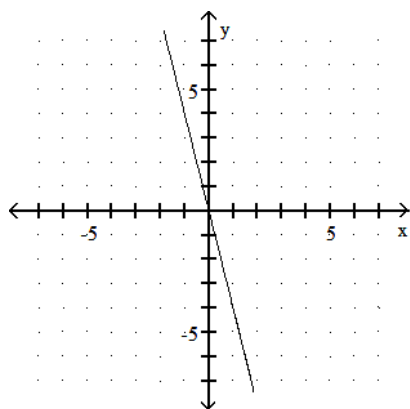


14) $y = -\frac{1}{4}x$

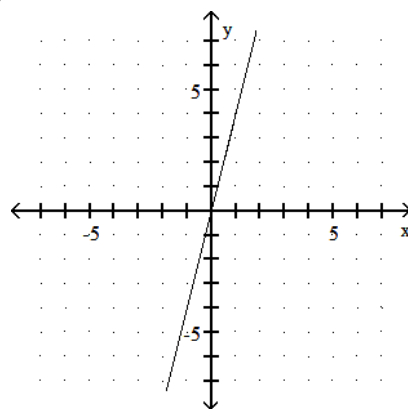
14) _____



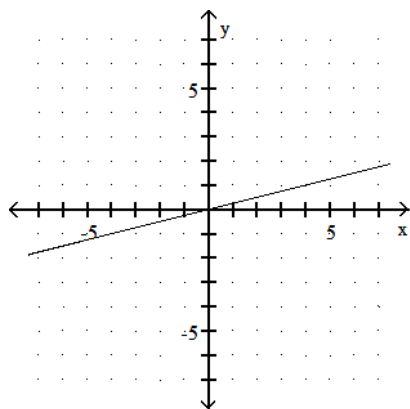
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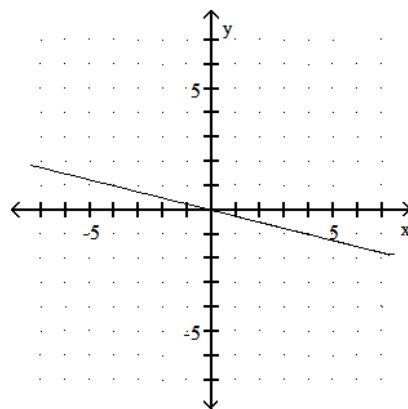
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C)

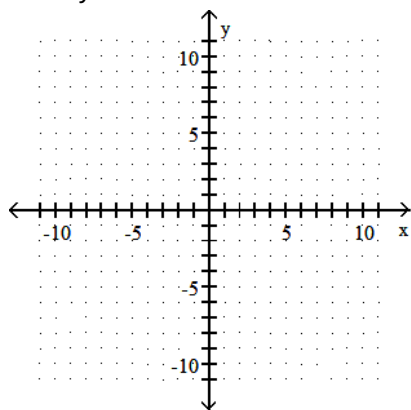


D)

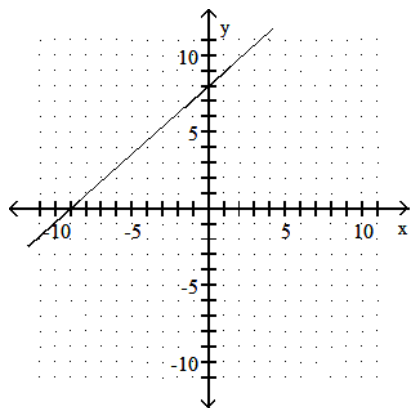


15) $9x - 8y = 72$

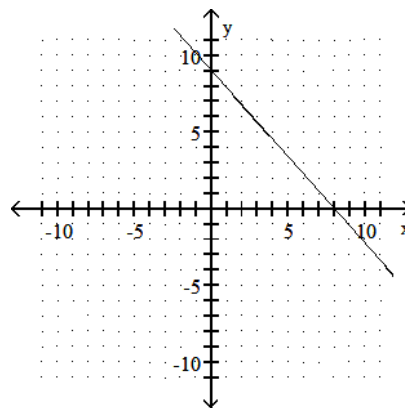
15) _____



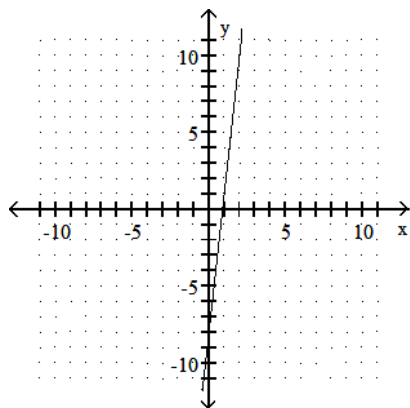
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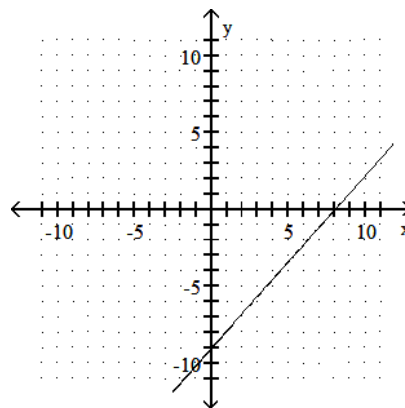
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C)

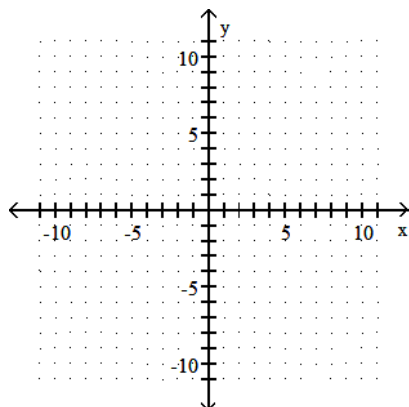


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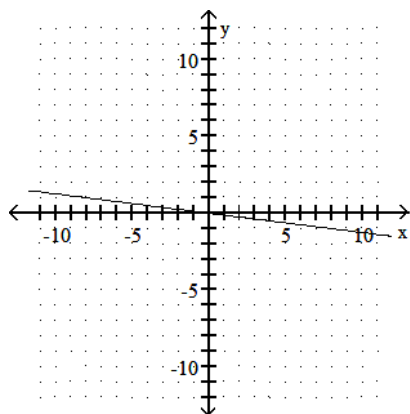


16) $y = -8x$

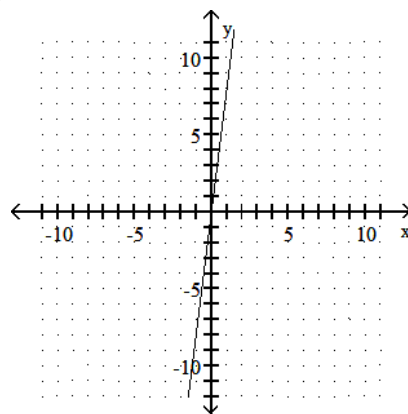
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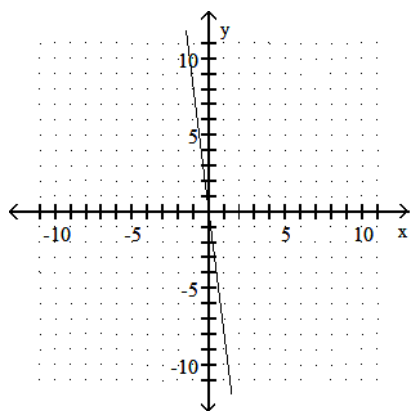
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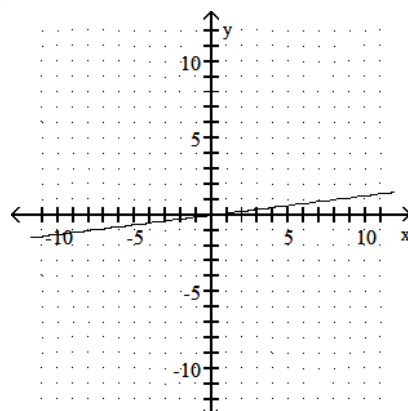
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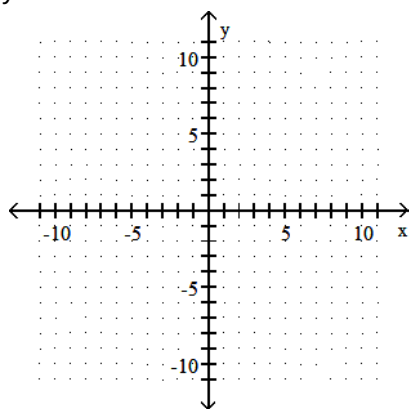
C)



D)

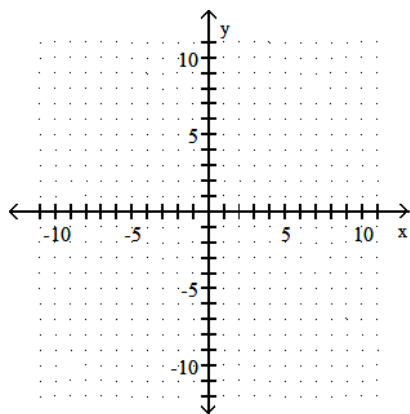


17) $x + y = 9$

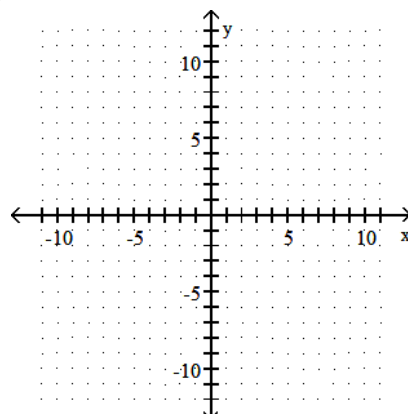


17) _____

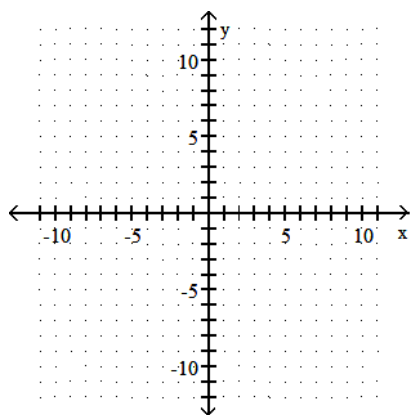
A)



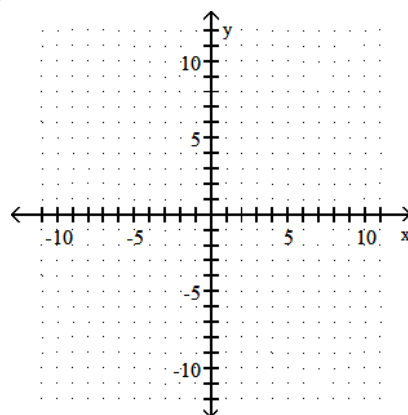
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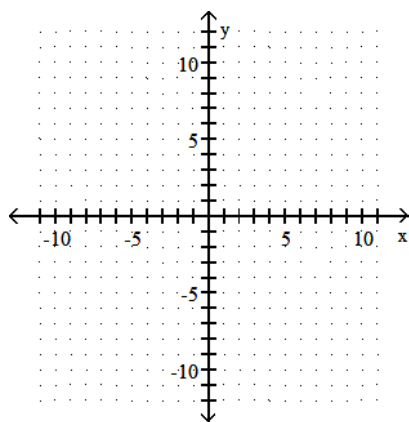
C)



D)

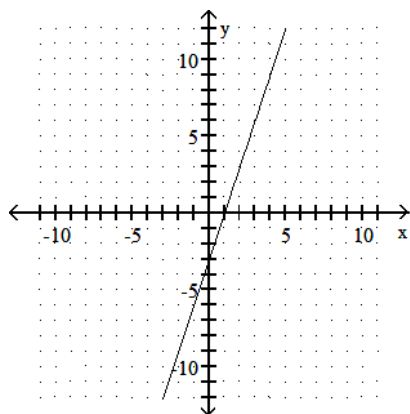


18) $y = 3x + 3$

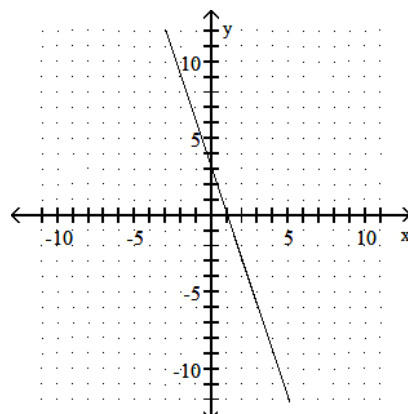


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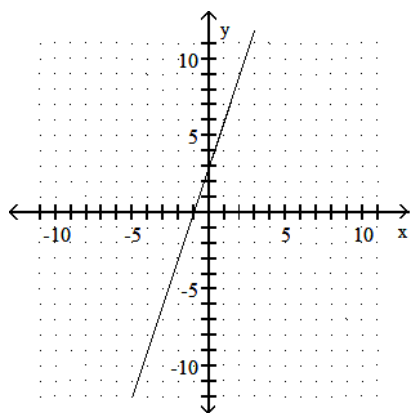
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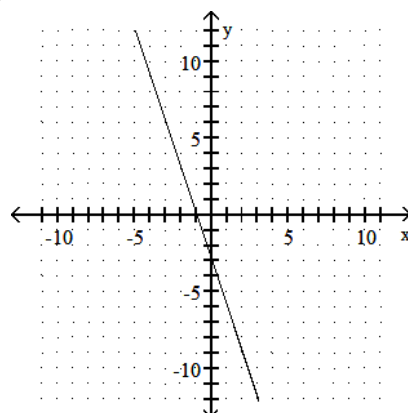
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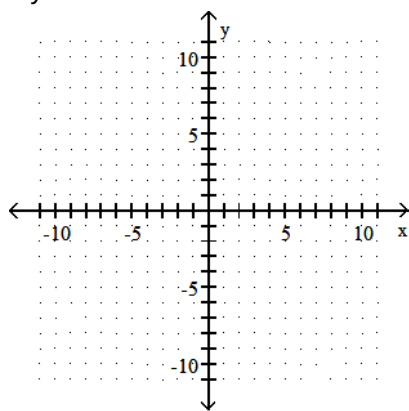
C)



D)

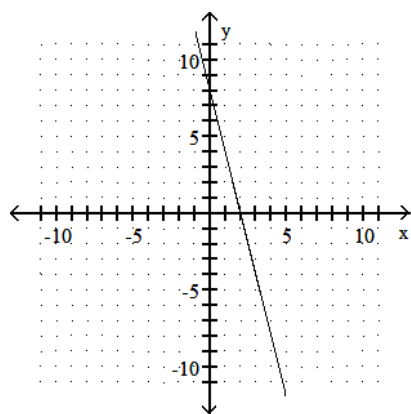


19) $-4x - y = -8$

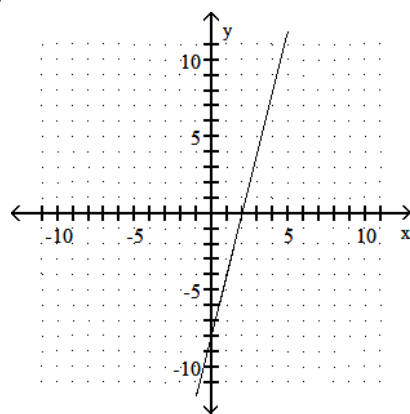


19) _____

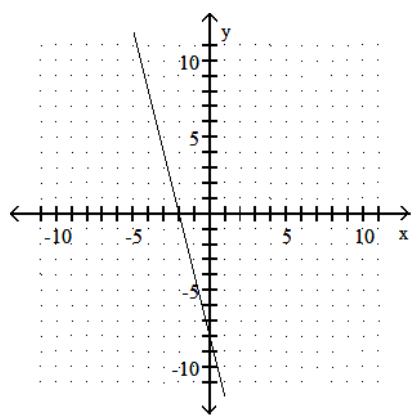
A)



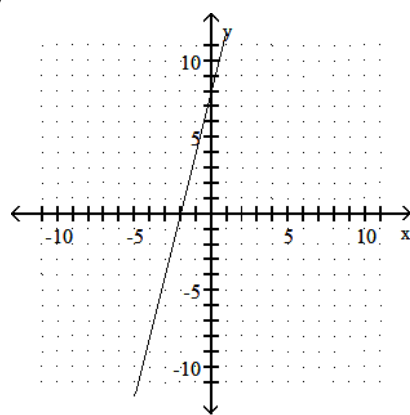
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C)

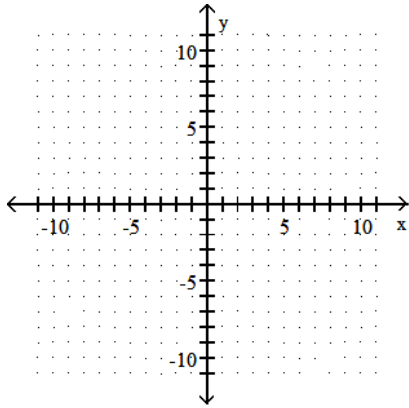


D)

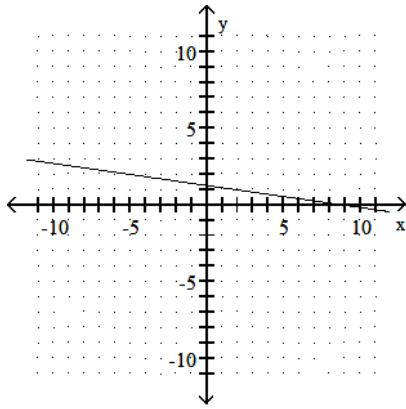


20) $-7y = x - 9$

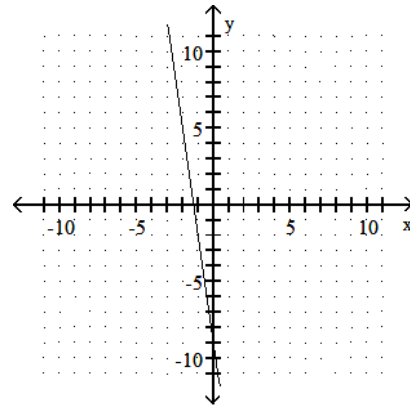
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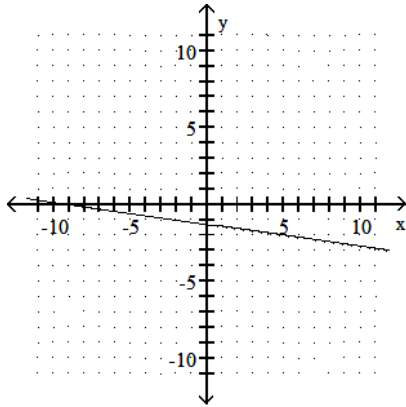
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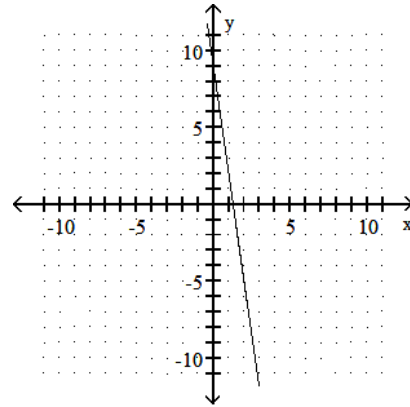
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C)

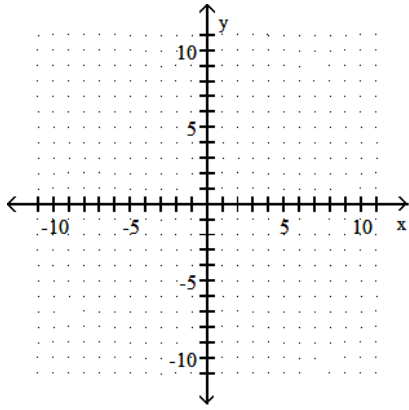


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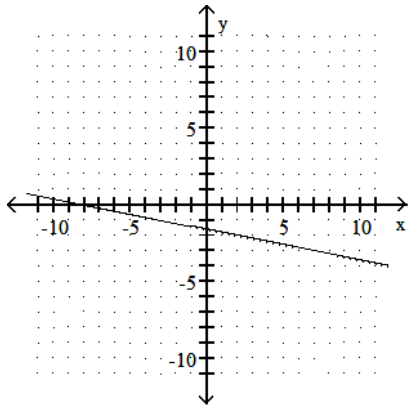


21) $-x = 5y - 8$

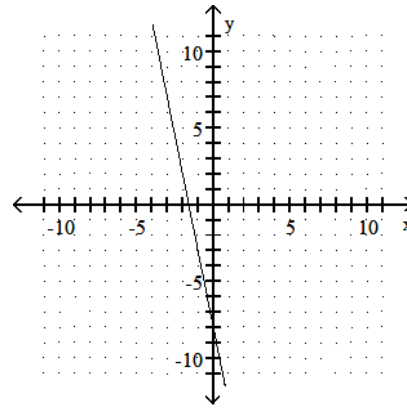
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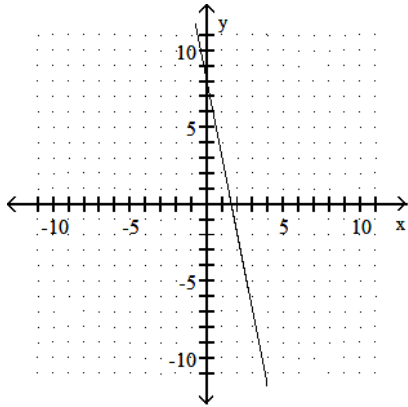
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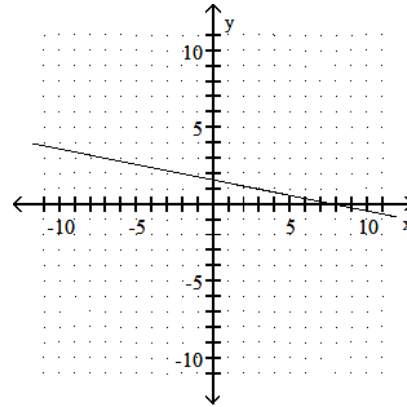
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C)

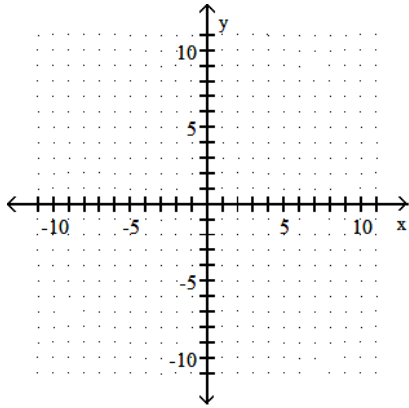


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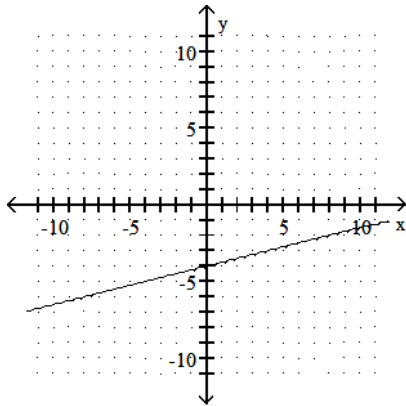


22) $2y + 8x = -8$

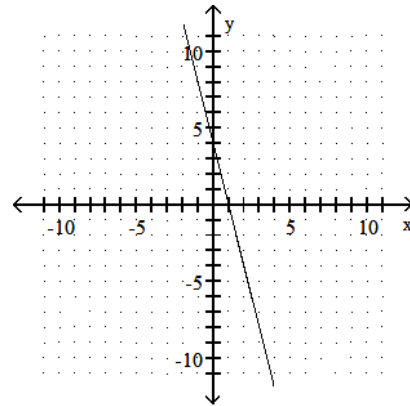
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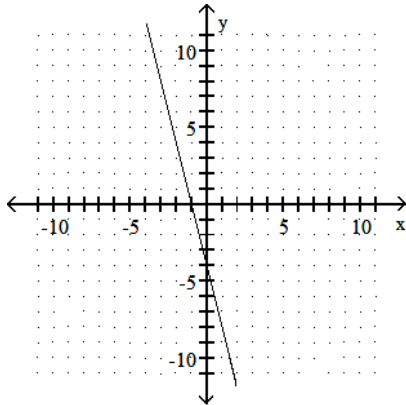
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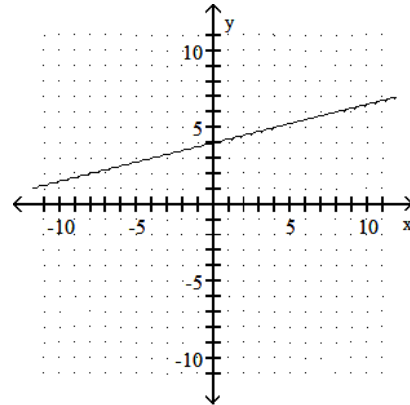
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C)

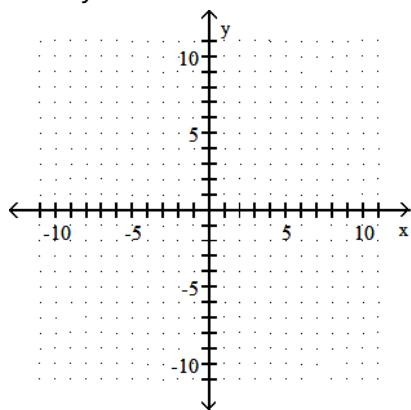


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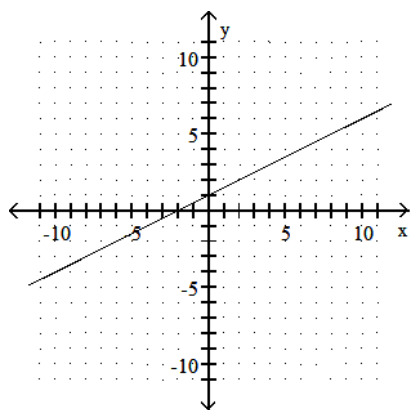


23) $-2x = y + 1$

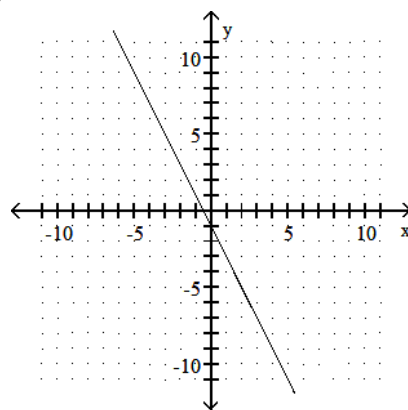
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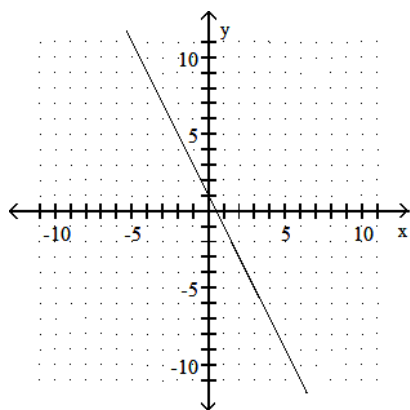
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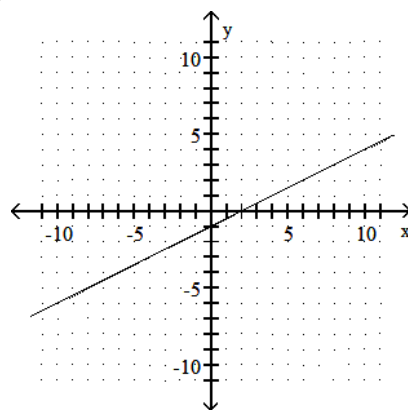
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C)

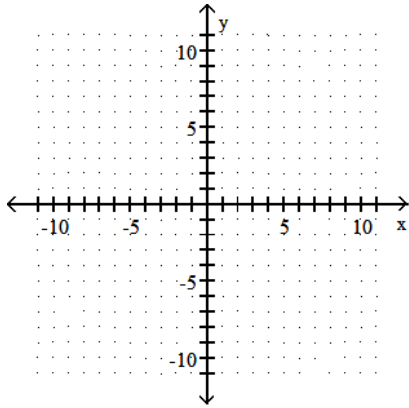


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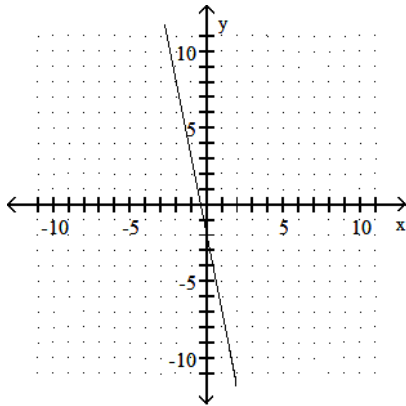


24) $-3x - 15y = -6$

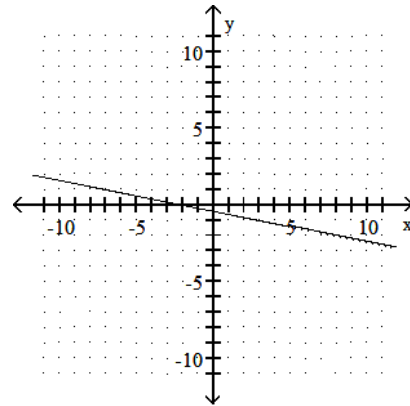
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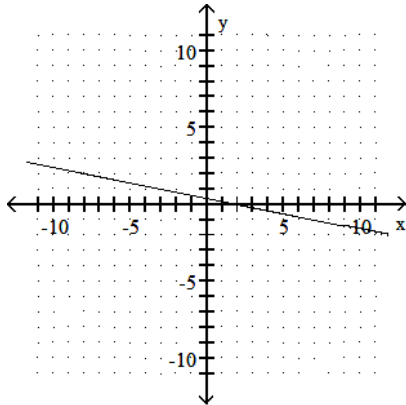
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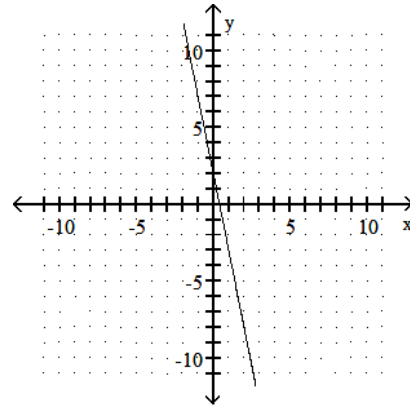
B)



C)

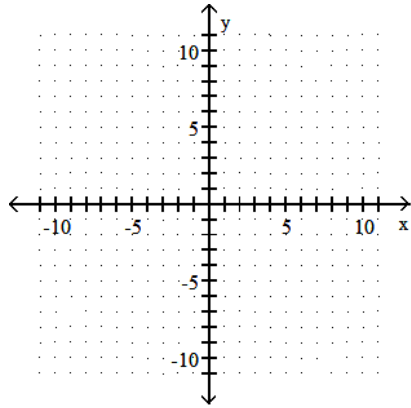


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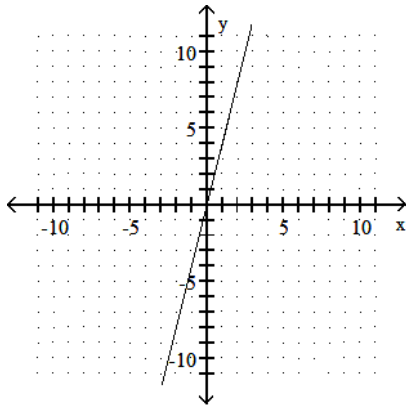


25) $4x + y = 0$

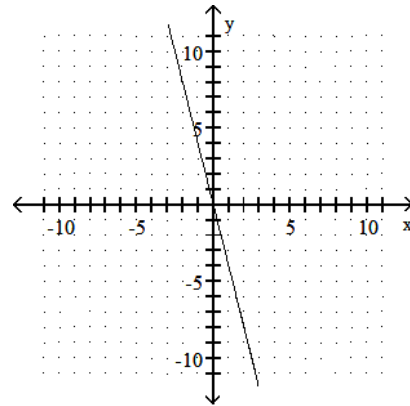
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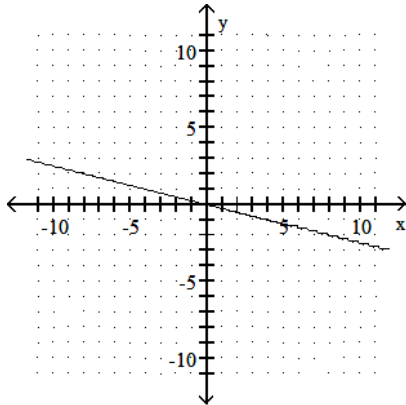
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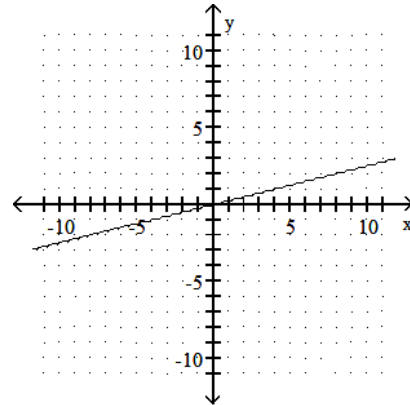
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C)

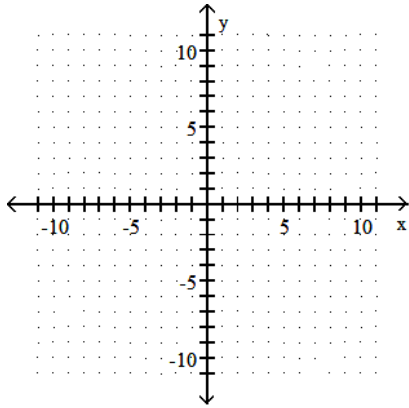


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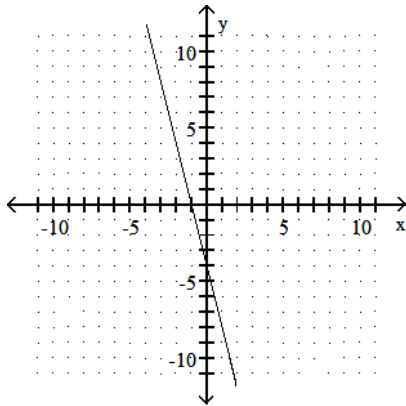


26) $y = -4x + 4$

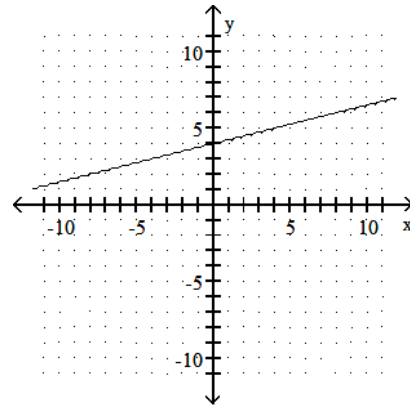
26) _____



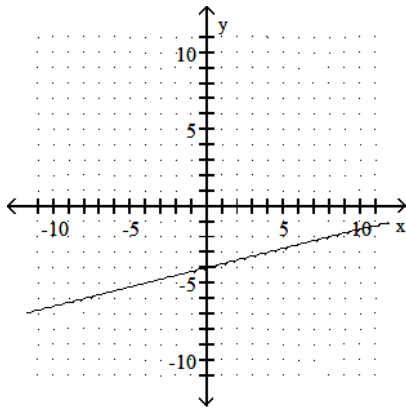
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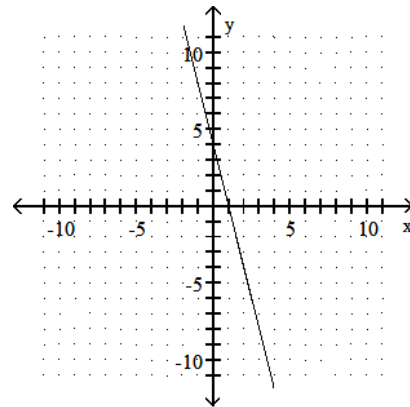
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C)

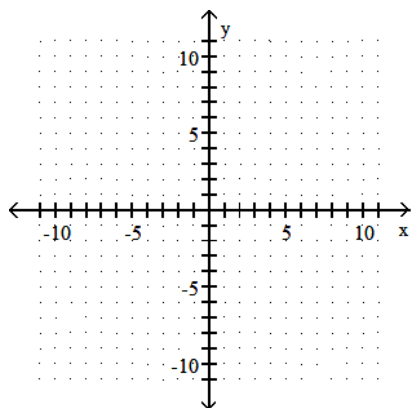


D)

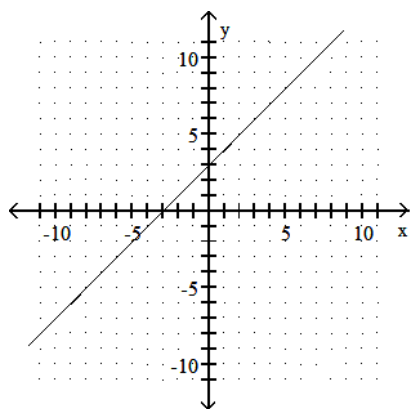


27) $y = \frac{1}{2}x + 3$

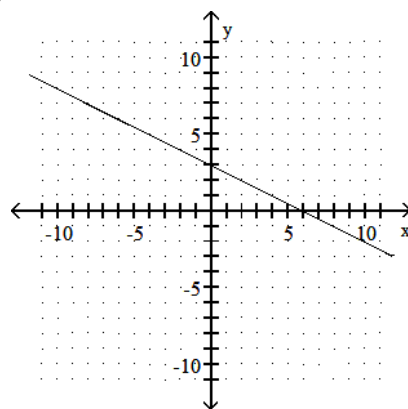
27) _____



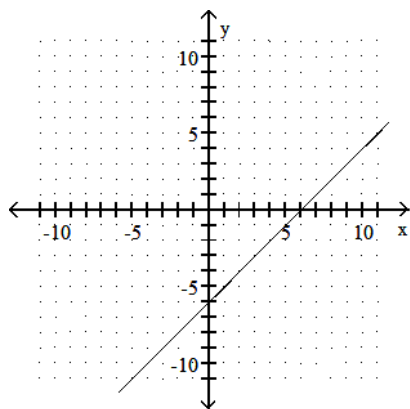
A)



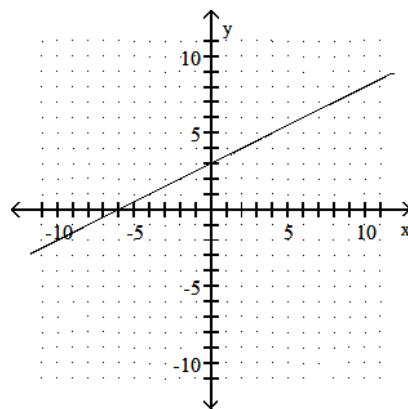
B)



C)

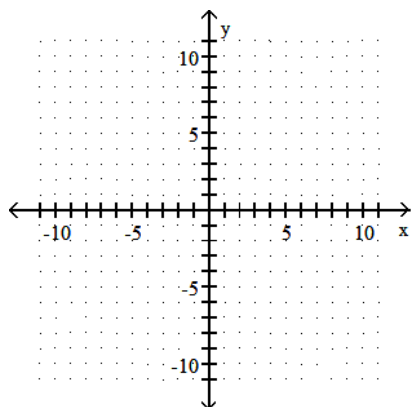


D)

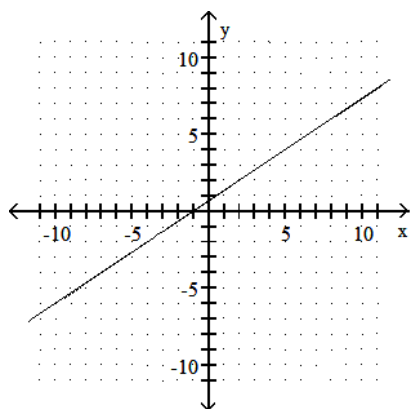


28) $2(x - 5) = -3(y - 2) + 2$.

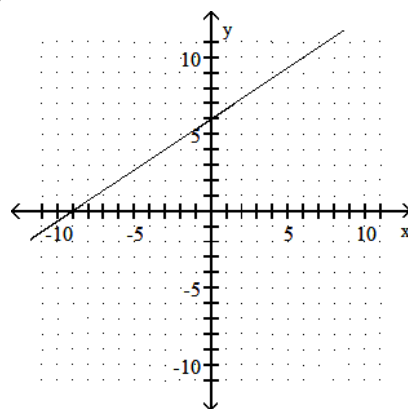
28) _____



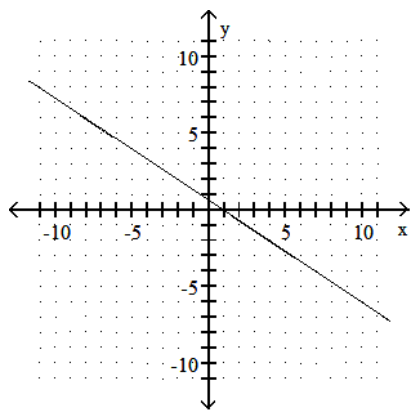
A)



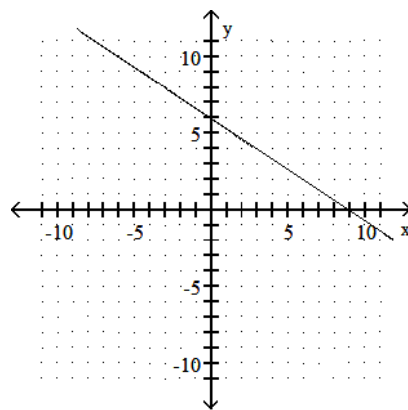
B)



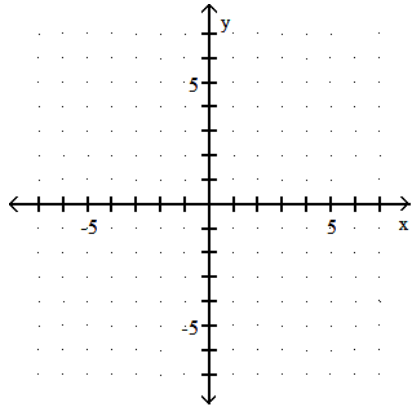
C)



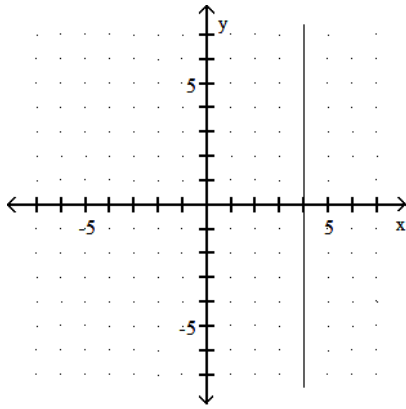
D)



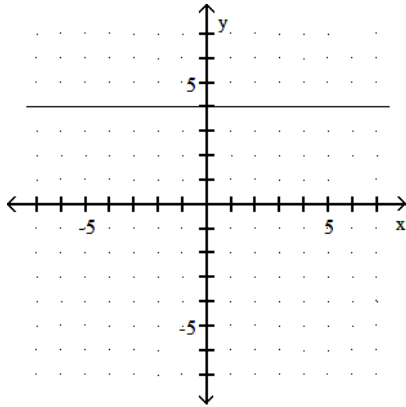
29) $x = 4$



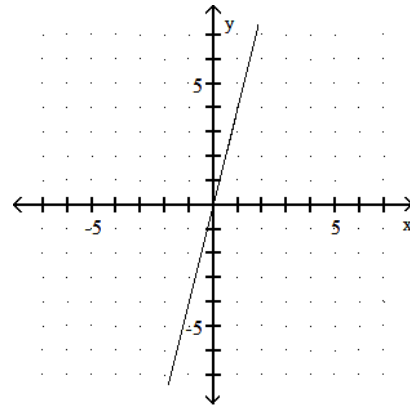
A)



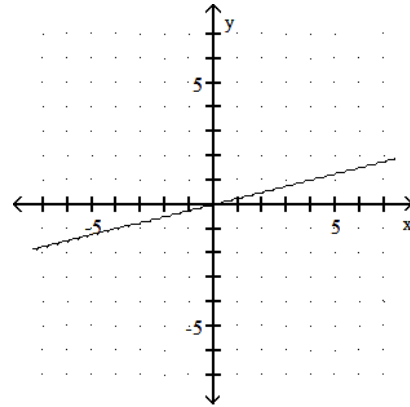
C)



B)



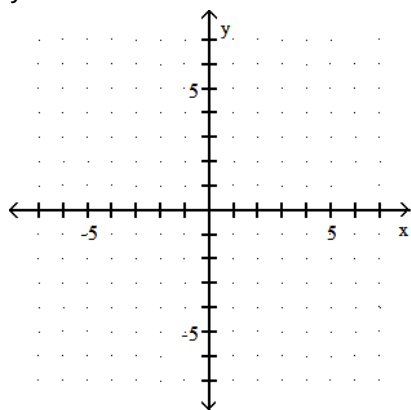
D)



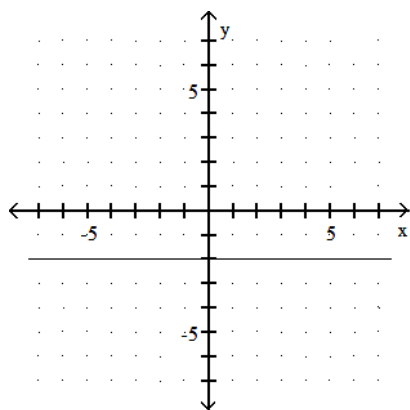
29) _____

30) $y = -2$

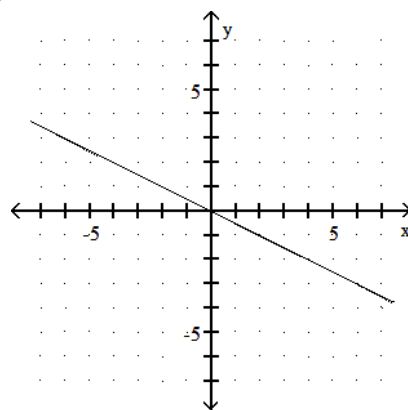
30) _____



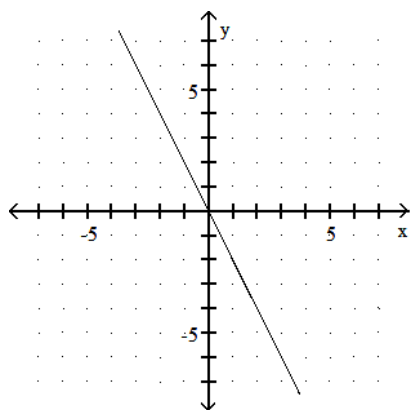
A)



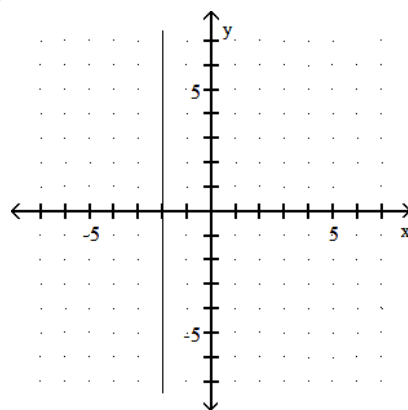
B)



C)



D)



Solve the equation.

31) $12x + 21 = 5x + 56$

31) _____

A) -8

B) 8

C) 5

D) -5

32) $7(y + 4) = 9y + 28$

32) _____

A) -28

B) 0

C) 56

D) 28

33) $3x - 7 = 4(x - 8)$

33) _____

A) 39

B) 25

C) -39

D) -25

- 34) $3(3x - 3) - 28 = 2x - 2$
 A) 5 B) 35 C) 245 D) -5 34) _____
- 35) $-5x + 1 - 3x - 6 = 11$
 A) - 8 B) 2 C) $-\frac{9}{4}$ D) - 2 35) _____
- 36) $7x = 6(8x + 3)$
 A) $\frac{41}{18}$ B) $-\frac{18}{41}$ C) $\frac{18}{7}$ D) $\frac{18}{41}$ 36) _____
- 37) $13(3x - 6) = 5x - 4$
 A) $\frac{37}{22}$ B) $\frac{41}{17}$ C) $\frac{37}{17}$ D) $-\frac{37}{17}$ 37) _____
- 38) $-36(x + 4) = -24(x + 6)$
 A) -60 B) 0
 C) all real numbers D) $\emptyset$ 38) _____
- 39) $2(x + 5) = 3(x - 6)$
 A) 28 B) -8
 C) all real numbers D) $\emptyset$ 39) _____
- 40) $(x - 7) - (x + 8) = 2x$
 A) $-\frac{15}{7}$ B) - 3 C) $-\frac{15}{2}$ D) 3 40) _____
- 41) $5(y - 8) - (4y + 5) = -2$
 A) - 11 B) 43 C) - 43 D) - 47 41) _____
- 42) $5(z + 2) - (4z - 6) = -7$
 A) 9 B) - 23 C) 23 D) 15 42) _____
- 43) $-9x + 3 + 7x = -3x + 8$
 A) 5 B) -3
 C) all real numbers D) $\emptyset$ 43) _____
- 44) $\frac{2}{5}x - \frac{1}{3}x = 4$
 A) 120 B) -120 C) -60 D) 60 44) _____
- 45) $\frac{4}{5} - \frac{1}{2}x = \frac{9}{10}$
 A) $-\frac{1}{5}$ B) $-\frac{1}{2}$ C) $\frac{1}{2}$ D) $\frac{1}{5}$ 45) _____

$$46) \frac{1}{5}x = \frac{1}{9}x + \frac{6}{5}$$

A) 0

B) $-\frac{6}{5}$

C) $\frac{2}{27}$

D) $\frac{27}{2}$

46) _____

$$47) \frac{1}{2}x - \frac{1}{6}x = 7$$

A) 12

B) 42

C) 21

D) 14

47) _____

$$48) \frac{17}{14}x + \frac{5}{7} = \frac{8}{7}x$$

A) 26

B) 10

C) -26

D) -10

48) _____

$$49) x - 19.6 = -9.3$$

A) 28.9

B) -28.9

C) -10.3

D) 10.3

49) _____

$$50) 13.0 = -24.9 - x$$

A) -11.9

B) 11.9

C) -37.9

D) 37.9

50) _____

$$51) 1.3x - 3.2 = 0.6x - 2.01$$

A) 1.7

B) 1.69

C) 1.683

D) -0.588

51) _____

Solve the equation for y.

$$52) x = 2y + 3$$

A) $y = 2x - 3$

B) $y = x - \frac{3}{2}$

C) $y = \frac{1}{2}x - 3$

D) $y = \frac{1}{2}x - \frac{3}{2}$

52) _____

$$53) 2x - 9y = 7$$

A) $y = \frac{9}{2}x + \frac{7}{2}$

B) $y = \frac{2}{9}x + \frac{7}{9}$

C) $y = \frac{2}{9}x - \frac{7}{9}$

D) $y = 2x - 7$

53) _____

$$54) 7x + 3y = 7$$

A) $y = \frac{7}{3}x - \frac{7}{3}$

B) $y = -\frac{7}{3}x + \frac{7}{3}$

C) $y = \frac{7}{3}x + \frac{7}{3}$

D) $y = 7x - 7$

54) _____

$$55) 4x + 7y = 8x + 9$$

A) $y = \frac{12}{7}x + \frac{9}{7}$

B) $y = 4x + 12$

C) $y = \frac{4}{7}x + \frac{9}{7}$

D) $y = \frac{7}{4}x - \frac{9}{4}$

55) _____

Solve the equation for the indicated variable.

$$56) A = \frac{1}{2}bh, \text{ for } b$$

A) $b = \frac{Ah}{2}$

B) $b = \frac{A}{2h}$

C) $b = \frac{2A}{h}$

D) $b = \frac{h}{2A}$

56) _____

57) $S = 2\pi rh + 2\pi r^2$, for h

A) $h = 2\pi(S - r)$

B) $h = \frac{S}{2\pi r} - 1$

C) $h = \frac{S - 2\pi r^2}{2\pi r}$

D) $h = S - r$

57) _____

58) $V = \frac{1}{3}Bh$, for h

A) $h = \frac{B}{3V}$

B) $h = \frac{3B}{V}$

C) $h = \frac{3V}{B}$

D) $h = \frac{V}{3B}$

58) _____

59) $P = S_1 + S_2 + S_3$, for S_1

A) $S_1 = S_2 + S_3 - P$

B) $S_1 = P - S_2 - S_3$

C) $S_1 = S_2 + P - S_3$

D) $S_1 = P + S_2 + S_3$

59) _____

60) $F = \frac{9}{5}C + 32$, for C

A) $C = \frac{5}{9}(F - 32)$

B) $C = \frac{5}{F - 32}$

C) $C = \frac{F - 32}{9}$

D) $C = \frac{9}{5}(F - 32)$

60) _____

61) $d = rt$, for r

A) $r = d - t$

B) $r = \frac{t}{d}$

C) $r = dt$

D) $r = \frac{d}{t}$

61) _____

62) $P = 2L + 2W$, for W

A) $W = P - 2L$

B) $W = P - L$

C) $W = \frac{P - 2L}{2}$

D) $W = \frac{P - L}{2}$

62) _____

Find the x-intercept and y-intercept for each equation. If an intercept does not exist, say so.

63) $-2x - 10y = 10$

A) x-intercept: (1, 0)

y-intercept: (0, 5)

C) x-intercept: (5, 0)

y-intercept: (0, -1)

B) x-intercept: (-5, 0)

y-intercept: (0, -1)

D) x-intercept: (-1, 0)

y-intercept: (0, -5)

63) _____

64) $2x - 4y = 12$

A) x-intercept: (3, 0)

y-intercept: (0, -6)

C) x-intercept: (-3, 0)

y-intercept: (0, 6)

B) x-intercept: (-6, 0)

y-intercept: (0, -3)

D) x-intercept: (6, 0)

y-intercept: (0, -3)

64) _____

65) $y = 7x$

A) x-intercept: (7, 0)

y-intercept: (0, -7)

C) x-intercept: (7, 0)

y-intercept: (0, 7)

B) x-intercept: (0, 0)

y-intercept: (0, 0)

D) x-intercept: (-7, 0)

y-intercept: (0, 7)

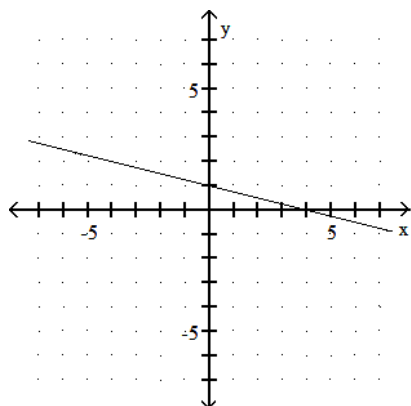
65) _____

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

Solve the problem.

66) The graph of a line is sketched in the figure below.

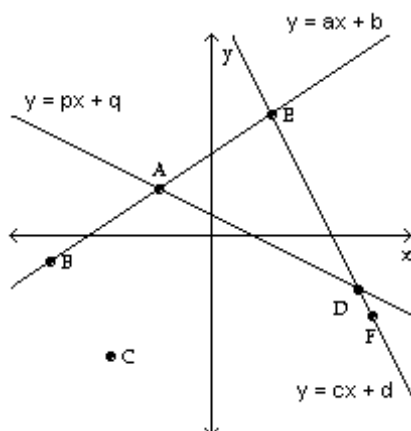
66) _____



- Estimate y when $x = 2$.
- Estimate y when $x = 0$.
- Estimate x when $y = 2$.
- Estimate x when $y = 0$.

67) The graphs of $y = ax + b$, $y = cx + d$, and $y = px + q$ are sketched in the figure below.

67) _____



Decide which of the points A, B, C, D, E, or F

- satisfy the equation $y = ax + b$.
- satisfy both of the equations $y = ax + b$ and $y = cx + d$.
- satisfy all three equations.
- do not satisfy any of the three equations.

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

Answer the question.

68) Skateboard jump A climbs steadily for 2 feet over a horizontal distance of 7 feet. Jump B climbs steadily for 6 feet over a horizontal distance of 7 feet. Which jump is steeper?

68) _____

A) Jump A

B) Jump B

- 69) Mountain road A steadily declines for 7606 feet over a horizontal distance of 5711 feet. Road B steadily declines for 4969 feet over a horizontal distance of 6168 feet. Which road is steeper?
 A) Road A B) Road B

69) _____

Find the slope of the line passing through the two given points.

- 70) (5, -7) and (-2, 6)

A) $-\frac{7}{13}$

B) $\frac{7}{13}$

C) $-\frac{13}{7}$

D) $\frac{13}{7}$

70) _____

- 71) (6, 9) and (6, -8)

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

B) $\frac{17}{12}$

C) 0

D) undefined

71) _____

- 72) (-8, 7) and (-9, 7)

A) -14

B) $-\frac{14}{17}$

C) 0

D) undefined

72) _____

- 73) (3.2, -2.6) and (6.6, 4)

A) -0.52

B) 1.94

C) -1.94

D) 0.52

73) _____

State whether the line between the two points is increasing, decreasing, horizontal, or vertical.

- 74) (-15, 4) and (-3, 8)

A) increasing

B) decreasing

C) horizontal

D) vertical

74) _____

- 75) (-14, 18) and (-2, -8)

A) increasing

B) decreasing

C) horizontal

D) vertical

75) _____

- 76) (14, -4) and (9, -4)

A) increasing

B) decreasing

C) horizontal

D) vertical

76) _____

- 77) (-8, 2) and (-8, 9)

A) increasing

B) decreasing

C) horizontal

D) vertical

77) _____

- 78) (3.21, 3.76) and (1.28, 1.89)

A) increasing

B) decreasing

C) horizontal

D) vertical

78) _____

- 79) (-11.89, 13.92) and (-8.02, -21.05)

A) increasing

B) decreasing

C) horizontal

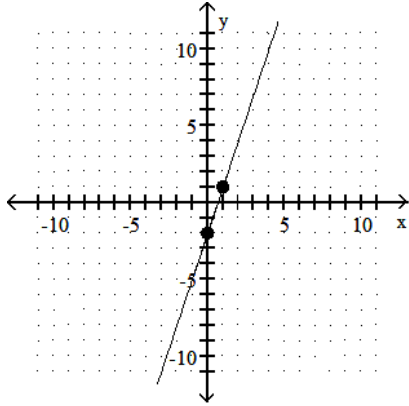
D) vertical

79) _____

Find the slope of the sketched line.

80)

80) _____



A) $-\frac{1}{3}$

B) $\frac{1}{3}$

C) - 3

D) 3

Using the indicated slopes of lines L_1 and L_2 , determine whether the lines are parallel, perpendicular, or neither.

Assume that the lines are not the same.

81) $m_1 = \frac{1}{5}, m_2 = \frac{1}{5}$

81) _____

A) parallel

B) perpendicular

C) neither

82) $m_1 = \frac{2}{3}, m_2 = -\frac{3}{2}$

82) _____

A) parallel

B) perpendicular

C) neither

83) $m_1 = -3, m_2 = -\frac{1}{3}$

83) _____

A) parallel

B) perpendicular

C) neither

84) m_1 and m_2 are 0

84) _____

A) parallel

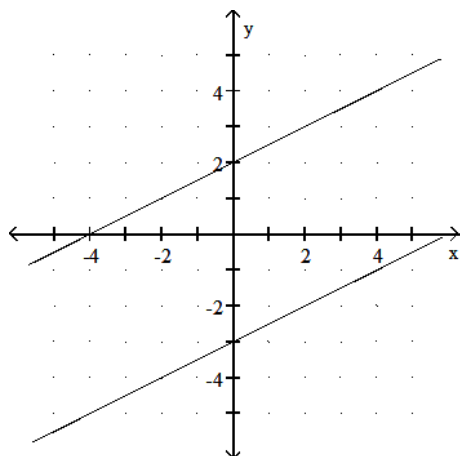
B) perpendicular

C) neither

Use the sketch of the given lines to determine whether they are parallel, perpendicular, or neither.

85)

85) _____



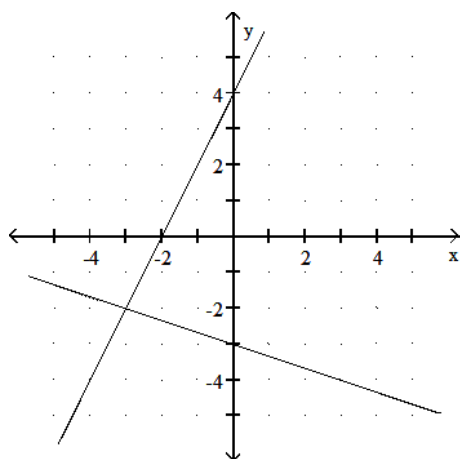
A) parallel

B) perpendicular

C) neither

86)

86) _____



A) parallel

B) perpendicular

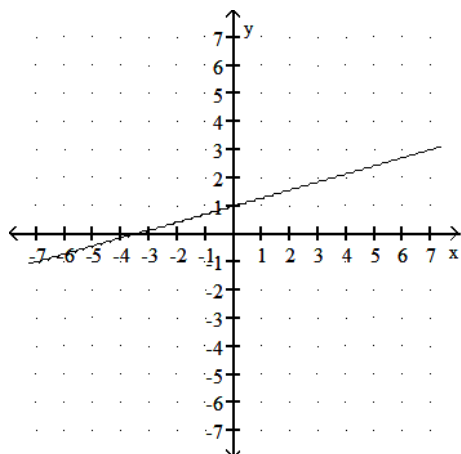
C) neither

Choose the sketch that has the indicated slope.

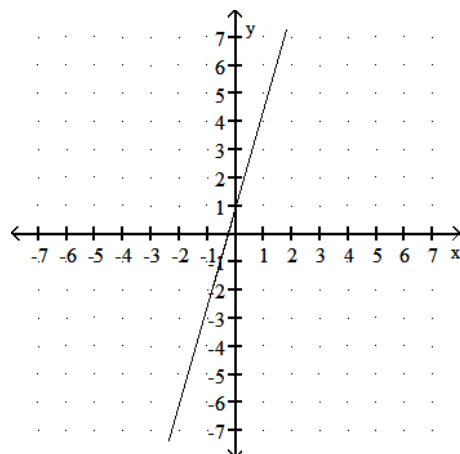
87) $m = \frac{7}{2}$

87) _____

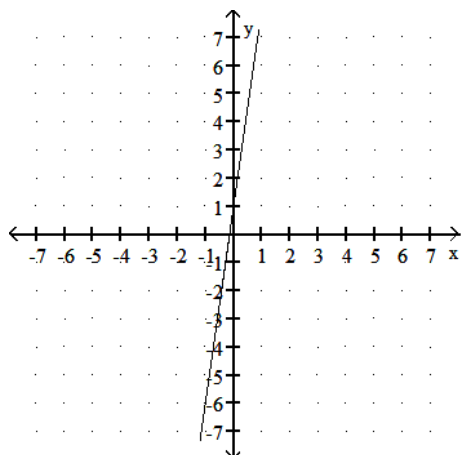
A)



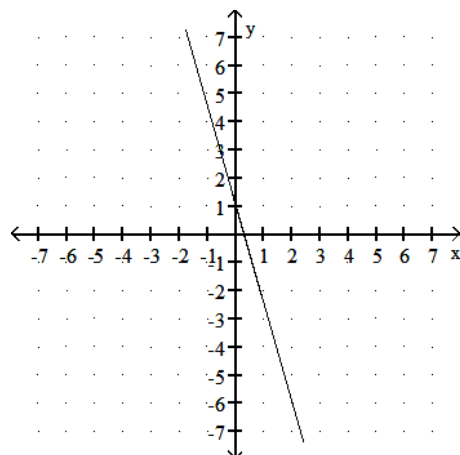
B)



C)



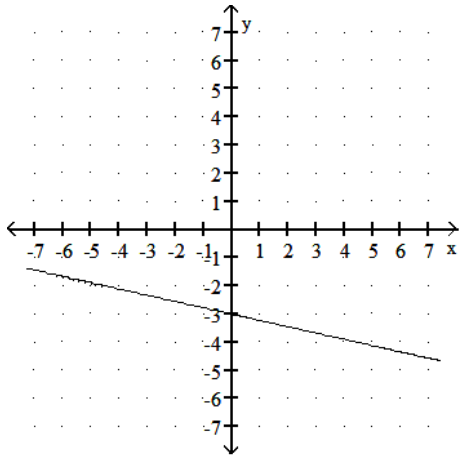
D)



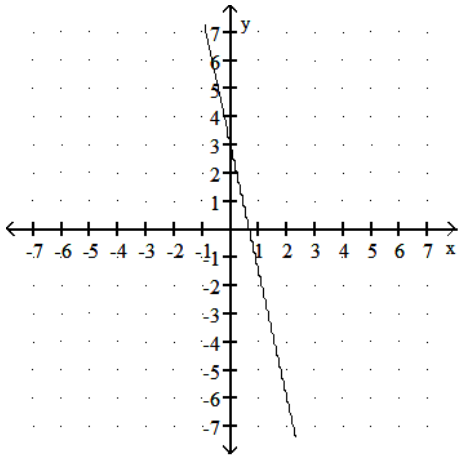
88) $m = -\frac{9}{2}$

88) _____

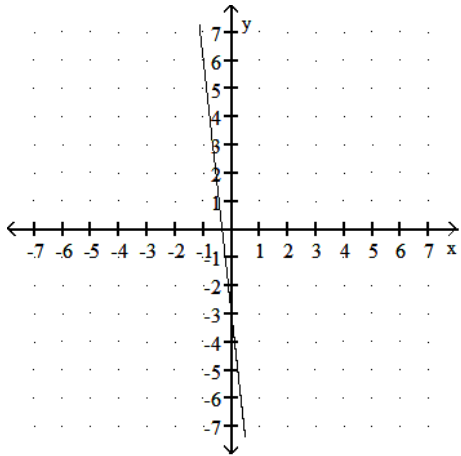
A)



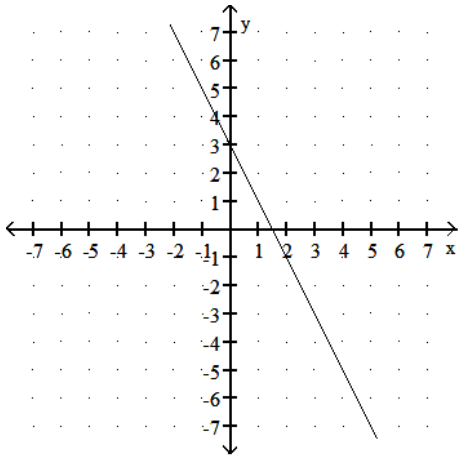
B)



C)

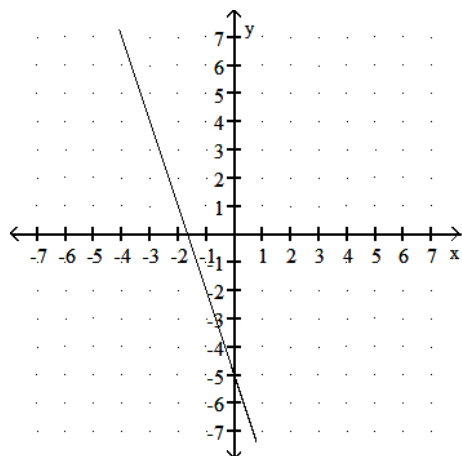


D)

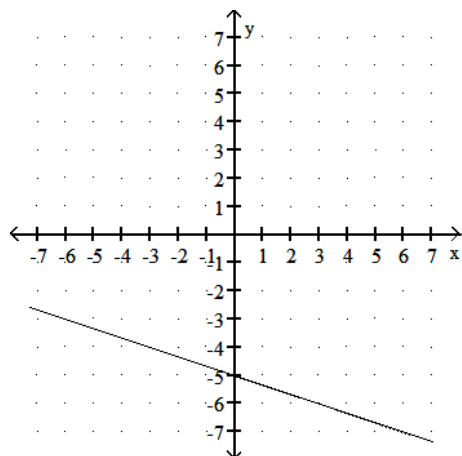


89) $m = 3$

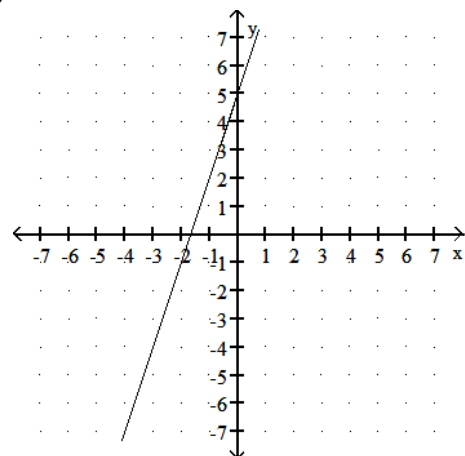
A)



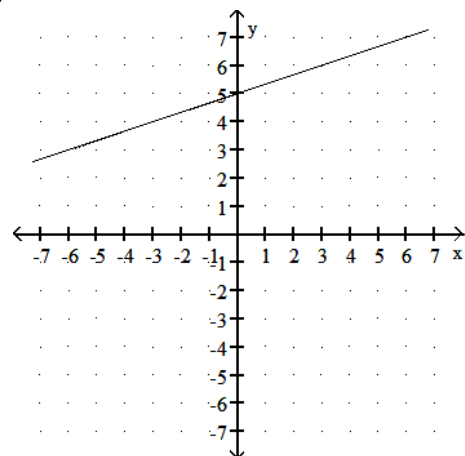
C)



B)



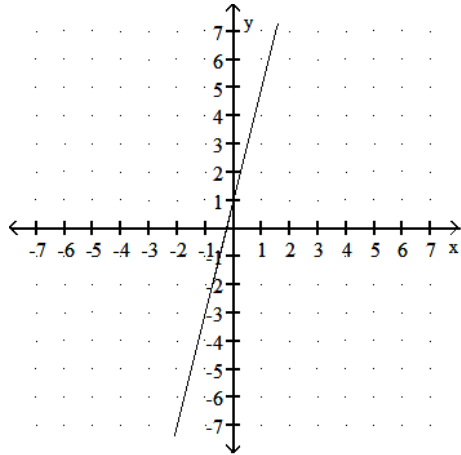
D)



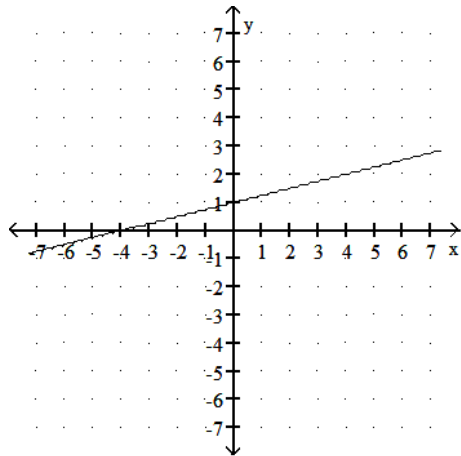
89) _____

90) $m = -4$

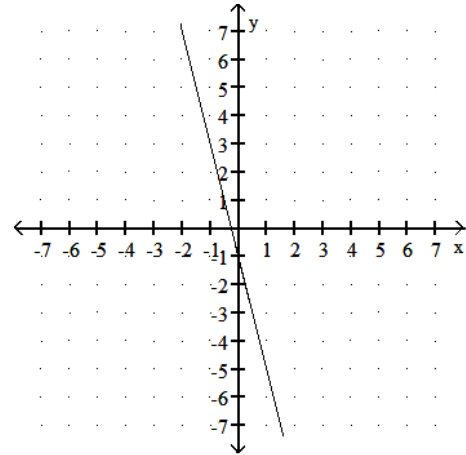
A)



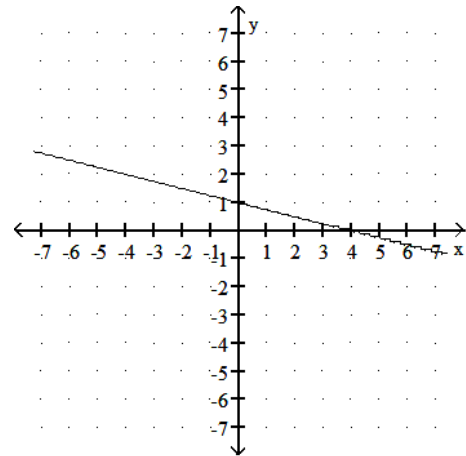
C)



B)



D)

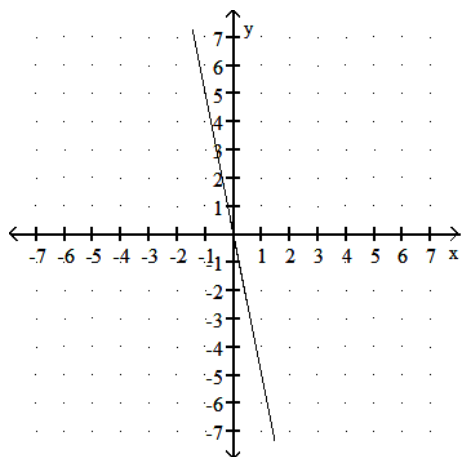


90) _____

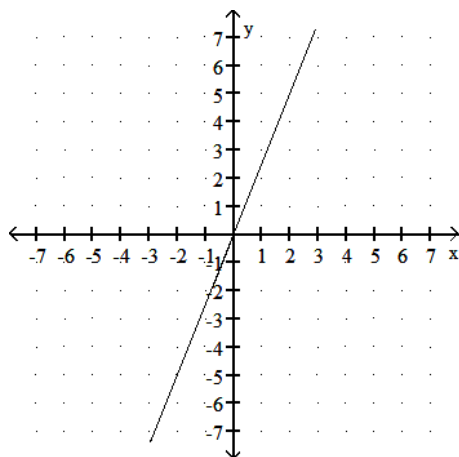
91) m is greater than $\frac{4}{9}$

91) _____

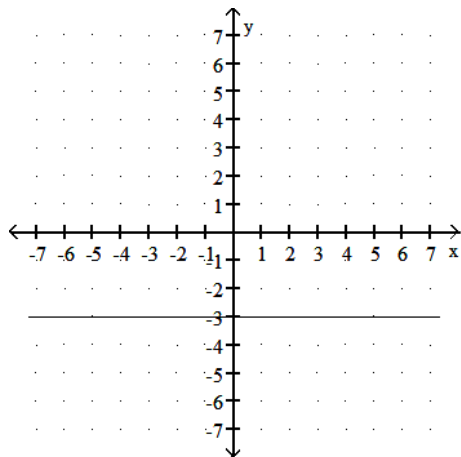
A)



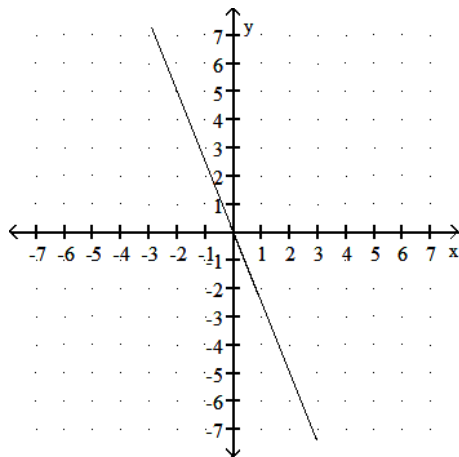
B)



C)



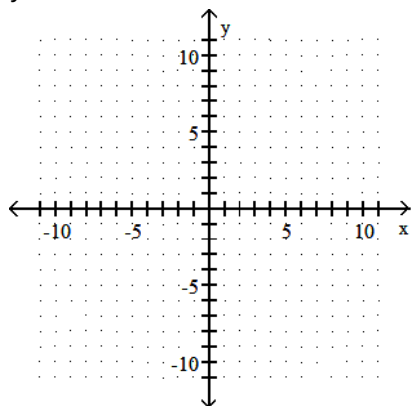
D)



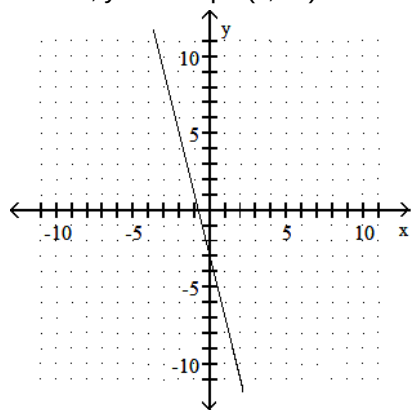
Determine the slope and the y-intercept for the linear equation. Use the slope and the y-intercept to sketch the graph of the equation.

92) $y = 3x + 4$

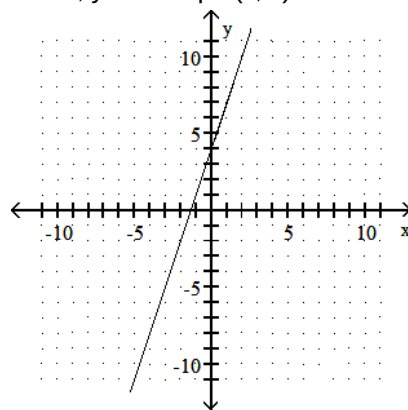
92) _____



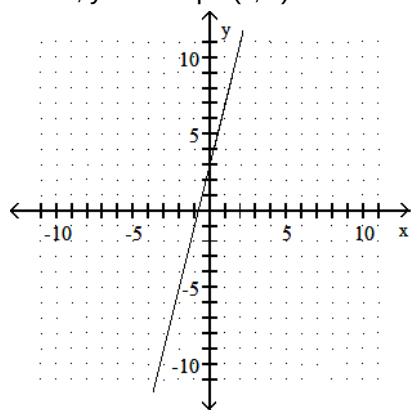
A) $m = -4$, y-intercept: $(0, -3)$



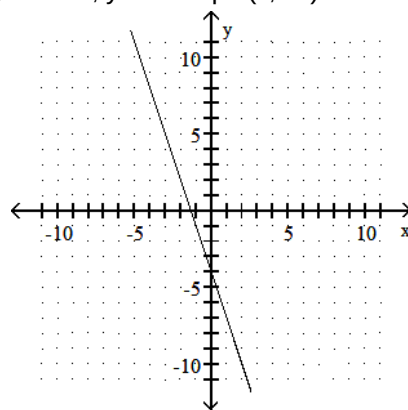
B) $m = 3$, y-intercept: $(0, 4)$



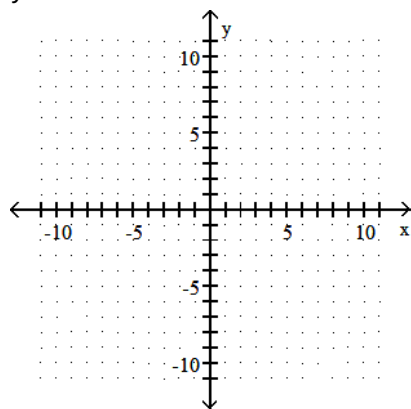
C) $m = 4$, y-intercept: $(0, 3)$



D) $m = -3$, y-intercept: $(0, -4)$

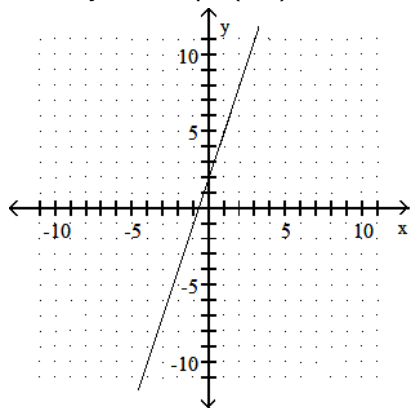


93) $y = -2x + 3$

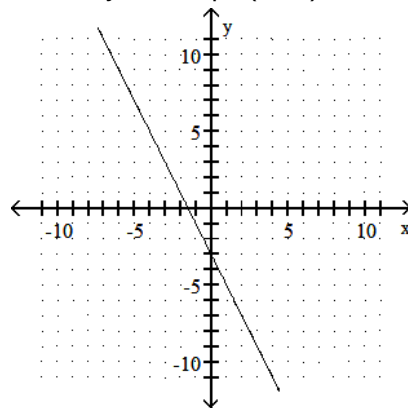


93) _____

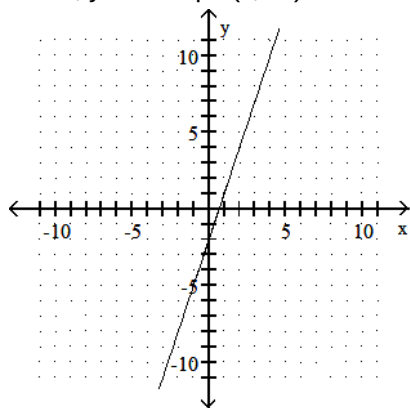
A) $m = 3$, y-intercept: $(0, 2)$



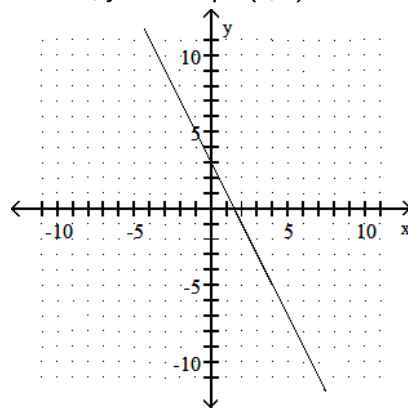
B) $m = -2$, y-intercept: $(0, -3)$



C) $m = 3$, y-intercept: $(0, -2)$

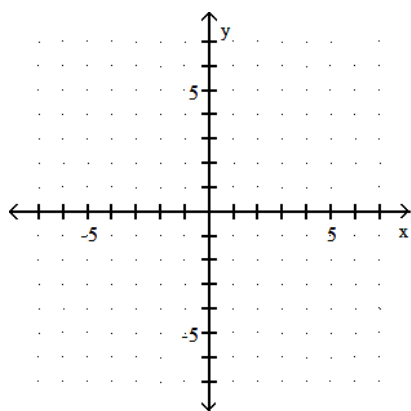


D) $m = -2$, y-intercept: $(0, 3)$

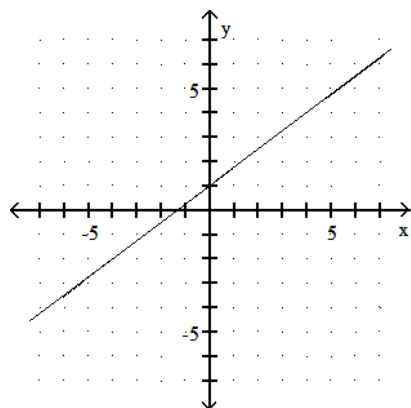


94) $y = \frac{3}{4}x + 1$

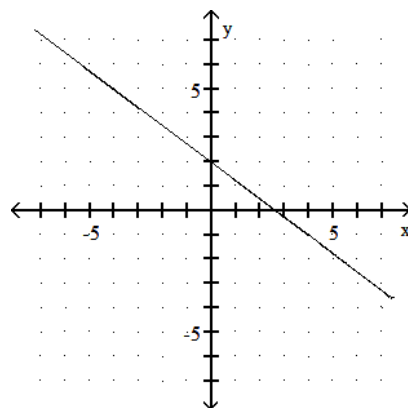
94) _____



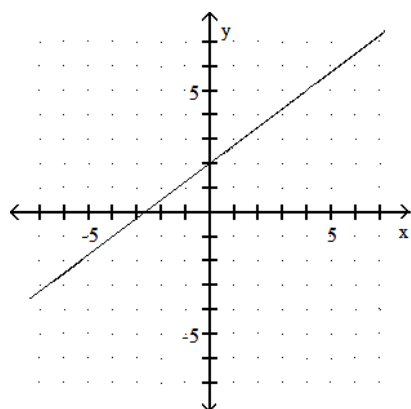
A) $m = \frac{3}{4}$, y-intercept: (0, 1)



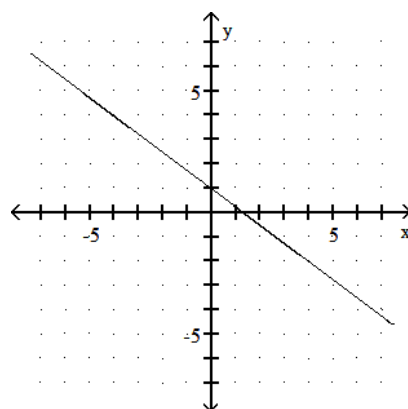
B) $m = -\frac{3}{4}$, y-intercept: (0, 2)



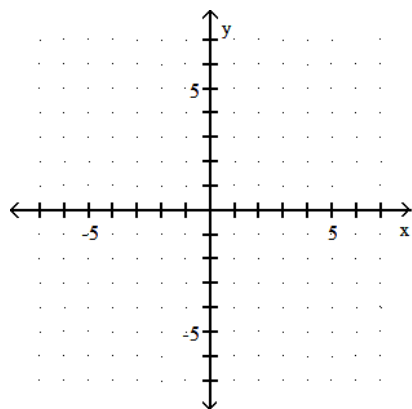
C) $m = \frac{3}{4}$, y-intercept: (0, 2)



D) $m = -\frac{3}{4}$, y-intercept: (0, 1)

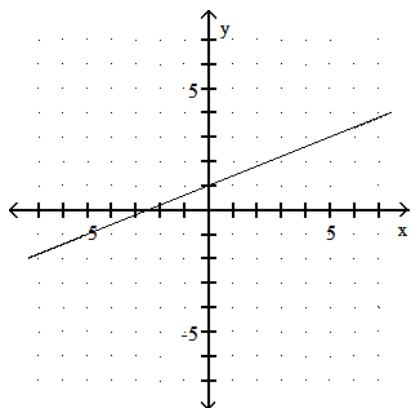


95) $y = -\frac{2}{5}x + 1$

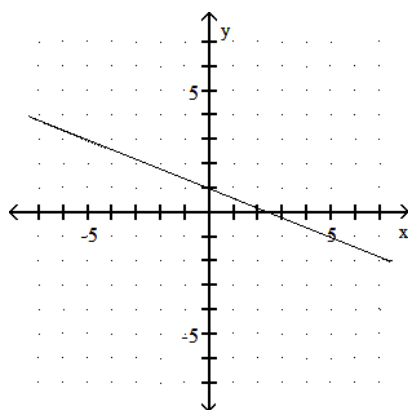


95) _____

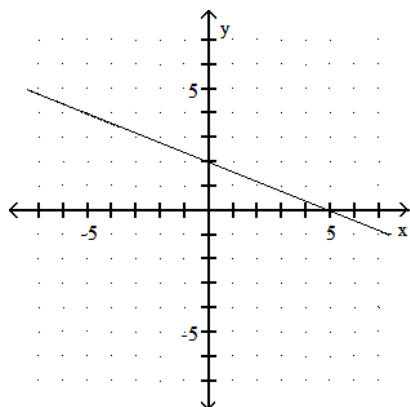
A) $m = \frac{2}{5}$, y-intercept: (0, 1)



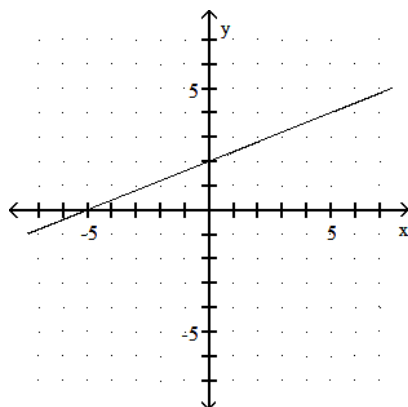
B) $m = -\frac{2}{5}$, y-intercept: (0, 1)



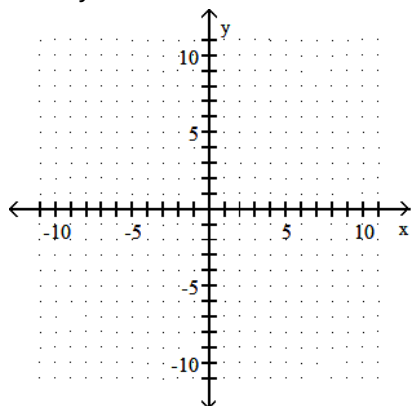
C) $m = -\frac{2}{5}$, y-intercept: (0, 2)



D) $m = \frac{2}{5}$, y-intercept: (0, 2)

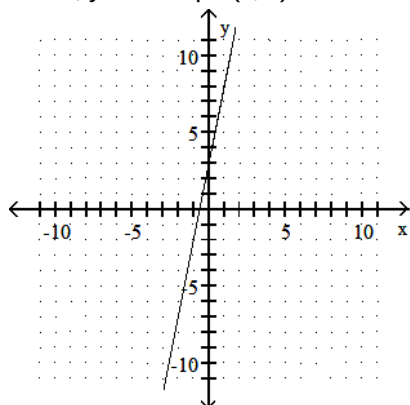


96) $-x + 5y = 15$

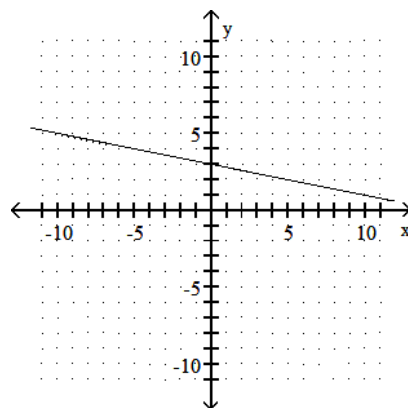


96) _____

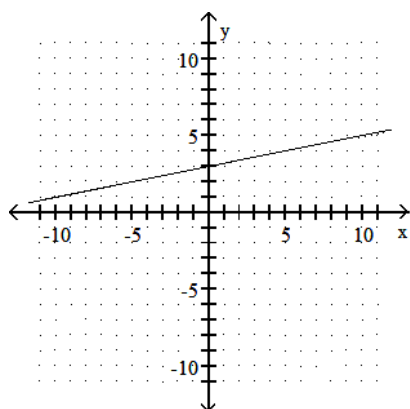
A) $m = 5$, y-intercept: $(0, 3)$



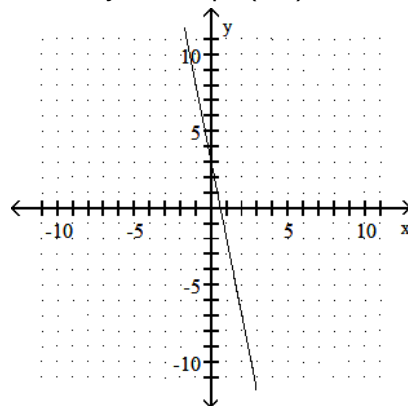
B) $m = -\frac{1}{5}$, y-intercept: $(0, 3)$



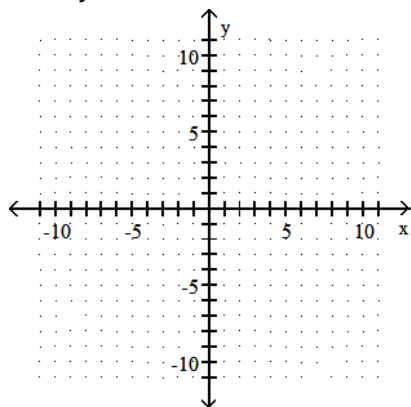
C) $m = \frac{1}{5}$, y-intercept: $(0, 3)$



D) $m = -5$, y-intercept: $(0, 3)$

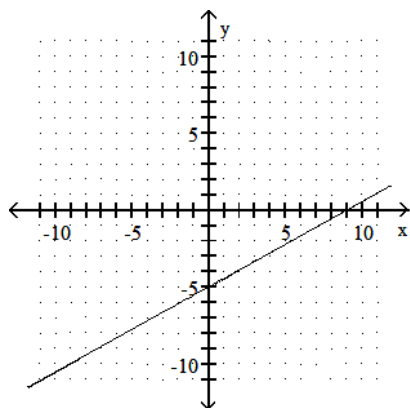


97) $5x - 9y = 45$

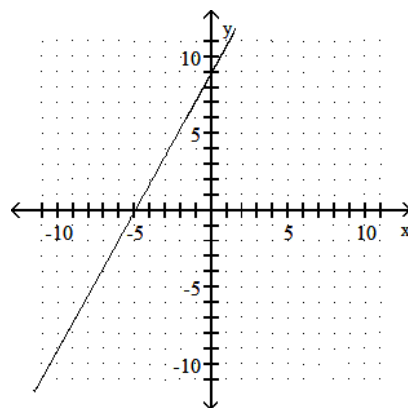


97) _____

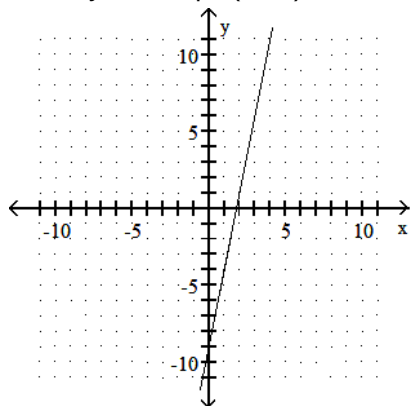
A) $m = \frac{5}{9}$, y-intercept: (0, -5)



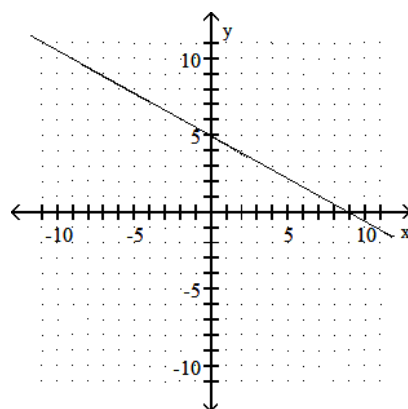
B) $m = \frac{9}{5}$, y-intercept: (0, 9)



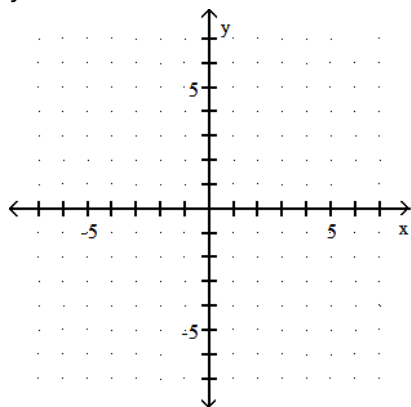
C) $m = 5$, y-intercept: (0, -9)



D) $m = -\frac{5}{9}$, y-intercept: (0, 5)

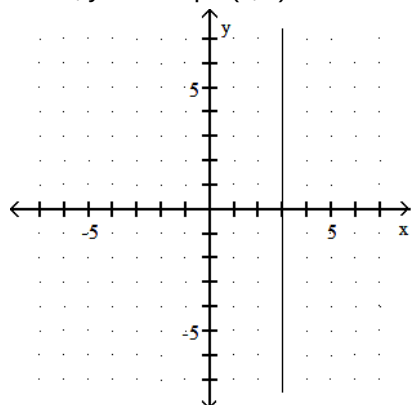


98) $y = 3$

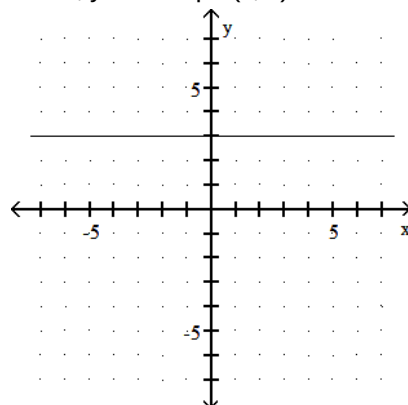


98) _____

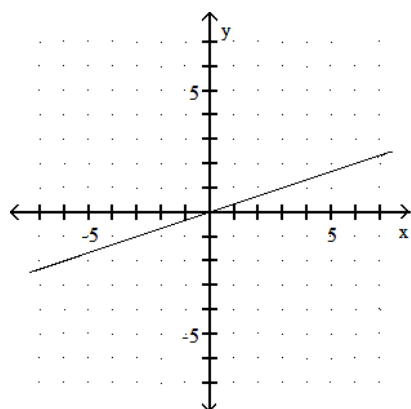
A) $m = 0$, y-intercept: $(0, 3)$



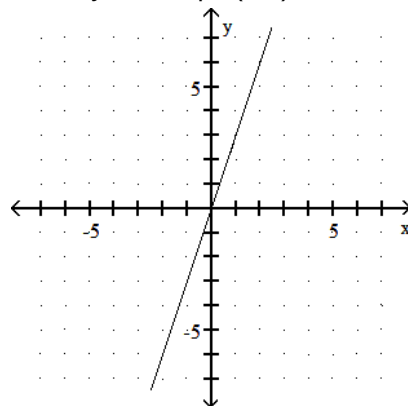
B) $m = 0$, y-intercept: $(0, 3)$



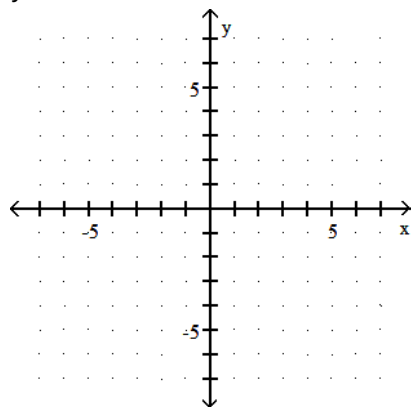
C) $m = \frac{1}{3}$, y-intercept: $(0, 0)$



D) $m = 3$, y-intercept: $(0, 0)$

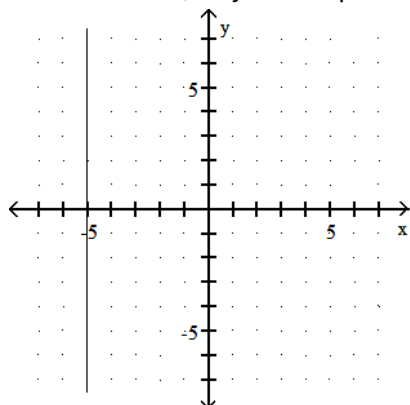


99) $y = -5x$

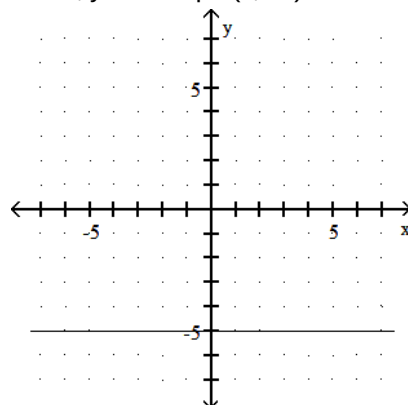


99) _____

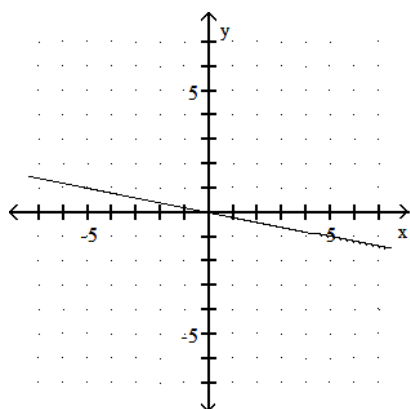
A) m is undefined, no y -intercept



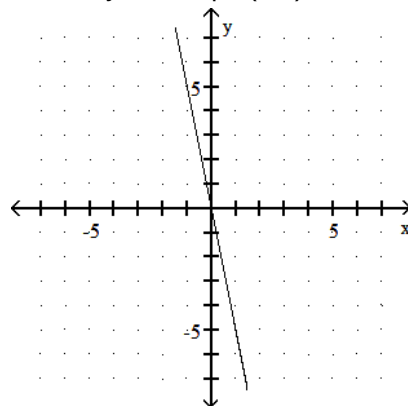
B) $m = 0$, y -intercept: $(0, -5)$



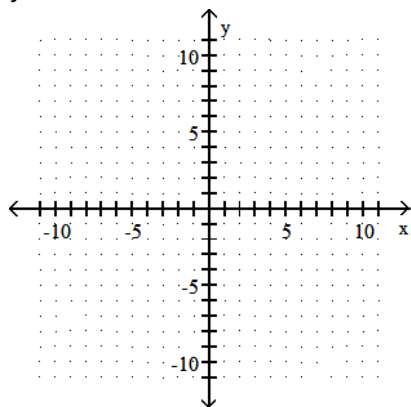
C) $m = -\frac{1}{5}$, y -intercept: $(0, 0)$



D) $m = -5$, y -intercept: $(0, 0)$

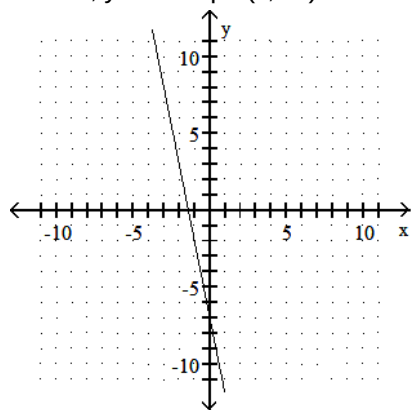


100) $y = 7x + 5$

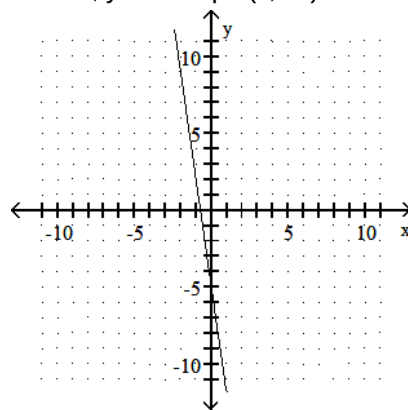


100) _____

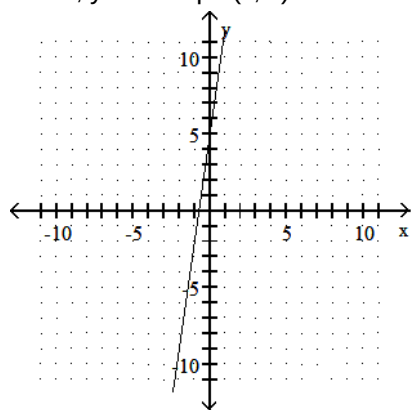
A) $m = -5$, y-intercept: $(0, -7)$



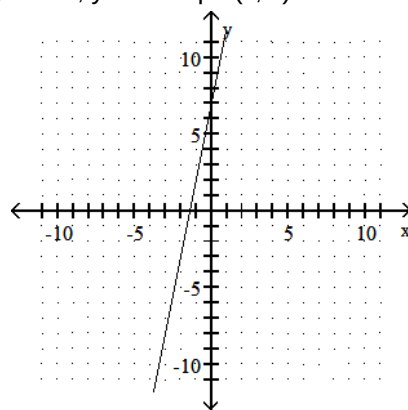
B) $m = -7$, y-intercept: $(0, -5)$



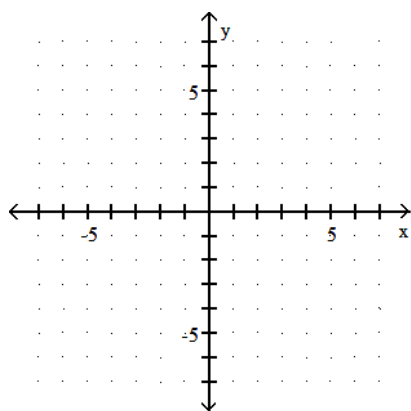
C) $m = 7$, y-intercept: $(0, 5)$



D) $m = 5$, y-intercept: $(0, 7)$

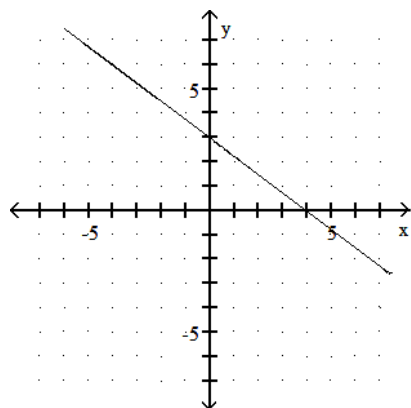


101) $y = \frac{3}{4}x + 2$

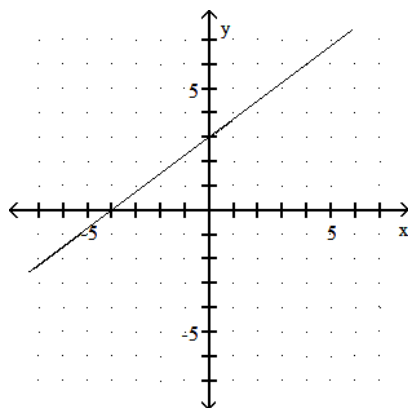


101) _____

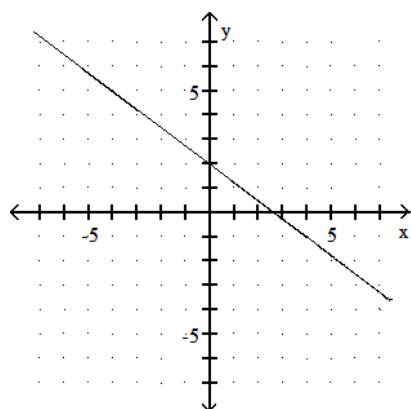
A) $m = -\frac{3}{4}$, y-intercept: (0, 3)



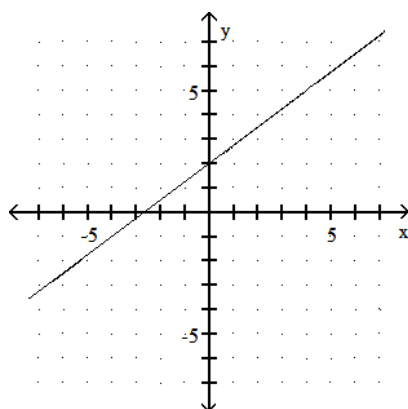
B) $m = \frac{3}{4}$, y-intercept: (0, 3)



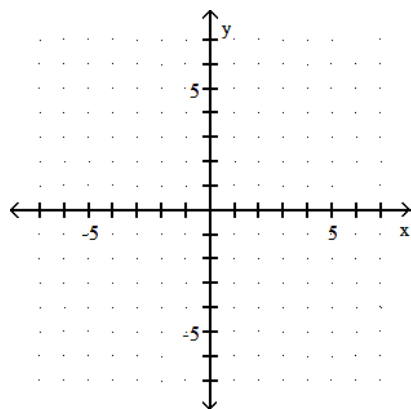
C) $m = -\frac{3}{4}$, y-intercept: (0, 2)



D) $m = \frac{3}{4}$, y-intercept: (0, 2)

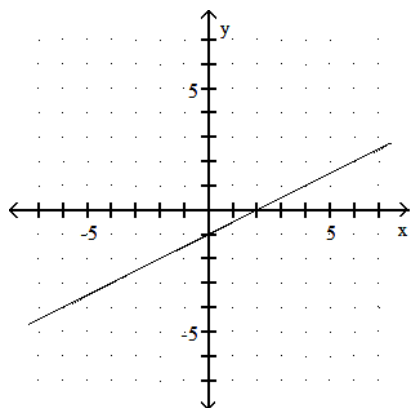


102) $y = -\frac{1}{2}x - 1$

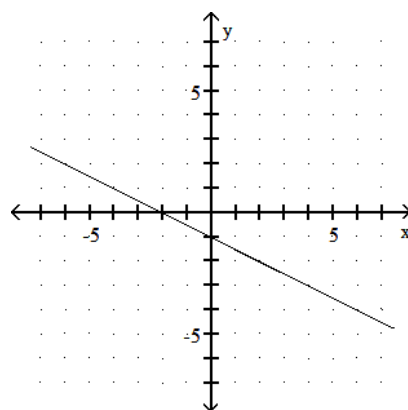


102) _____

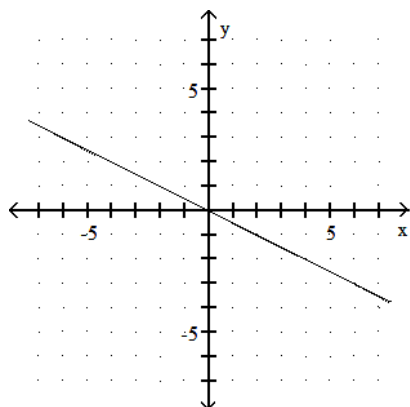
A) $m = \frac{1}{2}$, y-intercept: (0, -1)



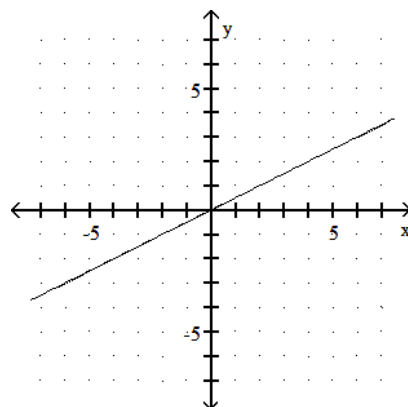
B) $m = -\frac{1}{2}$, y-intercept: (0, -1)



C) $m = -\frac{1}{2}$, y-intercept: (0, 0)



D) $m = \frac{1}{2}$, y-intercept: (0, 0)



Determine whether there is a line that passes through every point in the given table. If so, find the slope of that line.

103)

x	y
9	21
5	13
-3	-3
-4	-5

- A) A line with slope $m = 2$ goes through all the points.
 B) A line with slope $m = -2$ goes through all the points.
 C) A line does not go through all the points
 D) A line with slope $m = \frac{1}{2}$ goes through all the points.

103) _____

104)

x	y
-12	-6
0	-2
1	3
6	4

A) A line with slope $m = 3$ goes through all the points.B) A line with slope $m = \frac{1}{3}$ goes through all the points.C) A line with slope $m = -2$ goes through all the points.

D) A line does not go through all the points.

104) _____

Some values of a linear equation are given in the table, complete the table.

105)

x	y
18	-52
19	-55
20	
21	
22	
23	

A)

x	y
18	-52
19	-55
20	-38
21	-40
22	-42
23	-44

B)

x	y
18	-52
19	-55
20	62
21	65
22	68
23	71

C)

x	y
18	-52
19	-55
20	-58
21	-61
22	-64
23	-67

D)

x	y
18	-52
19	-55
20	-60
21	-63
22	-66
23	-69

105) _____

106)

x	y
16	30
17	
18	
19	
20	38
21	

A)

x	y
16	30
17	-36
18	-38
19	-40
20	38
21	-44

B)

x	y
16	30
17	36
18	38
19	40
20	38
21	44

C)

x	y
16	30
17	32
18	34
19	36
20	38
21	40

D)

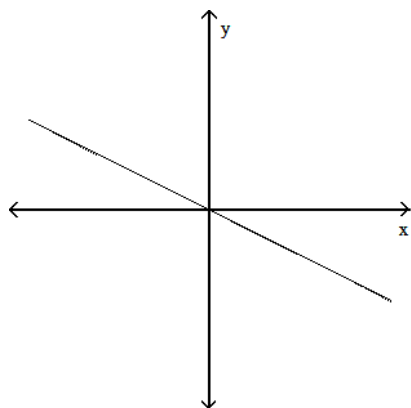
x	y
16	30
17	33
18	35
19	37
20	38
21	41

106) _____

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

Solve the problem.

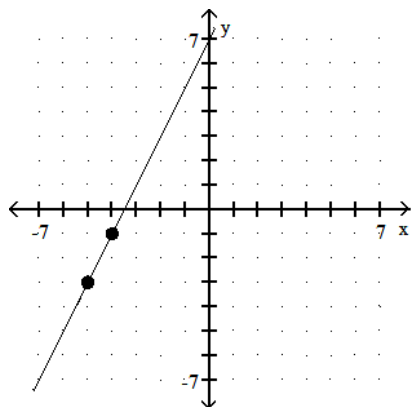
- 107) Refer to the line sketched in the figure below. Determine if the slope of the line is positive, negative, or zero. Then determine if the y-coordinate of the y-intercept is positive, negative, or zero. 107) _____



MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

Find an equation for the line.

- 108) 108) _____



A) $y = \frac{1}{2}x + \frac{5}{7}$

B) $y = 2x + 7$

C) $y = 2x - 9$

D) $y = 2x + 6$

Write an equation of a line with the given description.

- 109) A decreasing line that is nearly vertical with y-intercept above the origin. 109) _____

A) $y = -5x + 3$

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

C) $y = 5x + 3$

D) $y = -5x - 3$

- 110) An increasing line that is nearly horizontal with y-intercept below the origin. 110) _____

A) $y = -\frac{1}{5}x - 2$

B) $y = \frac{1}{5}x + 2$

C) $y = \frac{1}{5}x - 2$

D) $y = -\frac{1}{5}x + 2$

Determine whether the pair of lines is parallel, perpendicular, or neither.

111) $y = \frac{3}{7}x - 9$ and $y = \frac{3}{7}x - 7$ 111) _____

A) parallel

B) perpendicular

C) neither

112) $y = \frac{4}{5}x - 7$ and $y = -\frac{5}{4}x + 5$ 112) _____

A) parallel

B) perpendicular

C) neither

113) $y = \frac{4}{3}x - 4$ and $y = \frac{3}{4}x + 3$ 113) _____

A) parallel

B) perpendicular

C) neither

114) $9x - 7y = 4$ and $9x - 7y = 7$ 114) _____

A) parallel

B) perpendicular

C) neither

115) $7x - 2y = 1$ and $2x + 7y = 1$ 115) _____

A) parallel

B) perpendicular

C) neither

116) $3x - 8y = 7$ and $3x + 8y = 7$ 116) _____

A) parallel

B) perpendicular

C) neither

Solve the problem.

117) When a tow truck is called, the cost of the service is given by the equation $y = 3x + 85$, where y is in dollars and x is the number of miles the car is towed. Complete the given table and find and interpret the slope of the equation. 117) _____

Miles towed	Cost (dollars)
x	y
0	
1	
2	
3	
4	
5	
6	

A) $m = 3$; The number of miles the car is towed increases 3 miles for every dollar spent on the service.

Miles towed	Cost (dollars)
x	y
0	\$85
1	\$88
2	\$91
3	\$94
4	\$97
5	\$100
6	\$103

B) $m = 3$; The cost of the service increases \$3 every mile the car is towed.

Miles towed	Cost (dollars)
x	y
0	\$85
1	\$88
2	\$91
3	\$94
4	\$97
5	\$100
6	\$103

C) $m = 85$; The cost of the service increases \$85 every mile the car is towed.

Miles towed	Cost (dollars)
x	y
0	\$85
1	\$170
2	\$255
3	\$340
4	\$425
5	\$510
6	\$595

D) $m = 85$; The number of miles the car is towed increases 85 miles for every dollar spent on the service.

Miles towed	Cost (dollars)
x	y
0	\$85
1	\$170
2	\$255
3	\$340
4	\$425
5	\$510
6	\$595

118) The monthly cost of a certain long distance service is given by the equation $y = 0.07x + 5.95$ where y is in dollars and x is the amount of time in minutes called in a month. Complete the given table and find and interpret the slope of the equation. 118) _____

Time called (minutes)	Cost (dollars)
x	y
0	
1	
2	
3	
4	

A) $m = 5.95$; The cost of the long distance service increases \$5.95 for every 1 minute called.

Time called (minutes)	Cost (dollars)
x	y
0	\$5.95
1	\$11.90
2	\$17.85
3	\$23.80
4	\$29.75

B) $m = 5$; The number of minutes called in a month increases 5.95 for every dollar spent.

Time called (minutes)	Cost (dollars)
x	y
0	\$5.95
1	\$6.02
2	\$6.09
3	\$6.16
4	\$6.23

C) $m = 0.07$; The number of minutes called in a month increases 0.07 for every dollar spent.

Time called (minutes)	Cost (dollars)
x	y
0	\$5.95
1	\$6.95
2	\$7.95
3	\$8.95
4	\$9.95

D) $m = 0.07$; The cost of the long distance service increases \$0.07 for every 1 minute called.

Time called (minutes)	Cost (dollars)
x	y
0	\$5.95
1	\$6.02
2	\$6.09
3	\$6.16
4	\$6.23

119) The amount of water in a leaky bucket is given by the equation $y = 129 - 10x$, where y is in ounces and x is in minutes. Complete the given table and find and interpret the slope of the equation.

119) _____

time (minutes)	water in bucket (ounces)
x	y
0	
1	
2	
3	
4	

A) $m = 10$; The amount of water in the bucket increases 10 ounces every minute.

time (minutes)	water in bucket (ounces)
x	y
0	129
1	119
2	109
3	99
4	89

B) $m = 129$; The amount of water in the bucket increases 129 ounces every minute.

time (minutes)	water in bucket (ounces)
x	y
0	129
1	130
2	131
3	132
4	133

C) $m = -10$; The amount of water in the bucket decreases 10 ounces every minute.

time (minutes)	water in bucket (ounces)
x	y
0	129
1	119
2	109
3	99
4	89

D) $m = 129$; The amount of water in the bucket decreases 129 ounces every minute.

time (minutes)	water in bucket (ounces)
x	y
0	129
1	139
2	149
3	159
4	169

120) The altitude above sea level of an airplane just after taking off from an airport on a high plateau is given by the equation $y = 1200x + 2060$, where y is in feet and x is the time in minutes since take-off. Complete the given table and find and interpret the slope. 120) _____

time since takeoff (minutes)	altitude above sea (feet)
x	y
0	
1	
2	
3	
4	

A) $m = 2060$; The minutes since take-off increases 2060 for every foot of altitude.

time since takeoff (minutes)	altitude above sea (feet)
x	y
0	2060
1	3260
2	2400
3	3600
4	4800

B) $m = 2060$; The altitude of the airplane increases 2060 feet every minute.

time since takeoff (minutes)	altitude above sea (feet)
x	y
0	2060
1	1200
2	2400
3	3600
4	4800

C) $m = 2060$; The minutes since take-off increases 1200 for every foot of altitude.

time since takeoff (minutes)	altitude above sea (feet)
x	y
0	2060
1	3260
2	4460
3	5660
4	6860

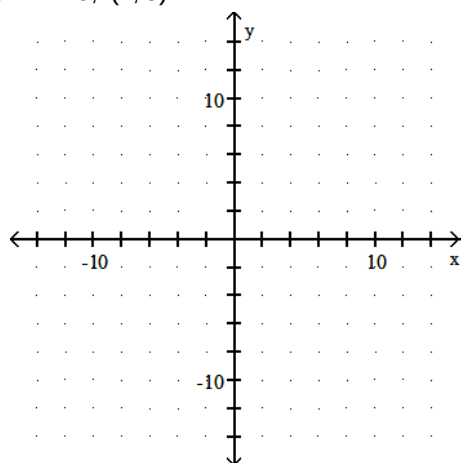
D) $m = 1200$; The altitude of the airplane increases 1200 feet every minute.

time since takeoff (minutes)	altitude above sea (feet)
x	y
0	2060
1	3260
2	4460
3	5660
4	6860

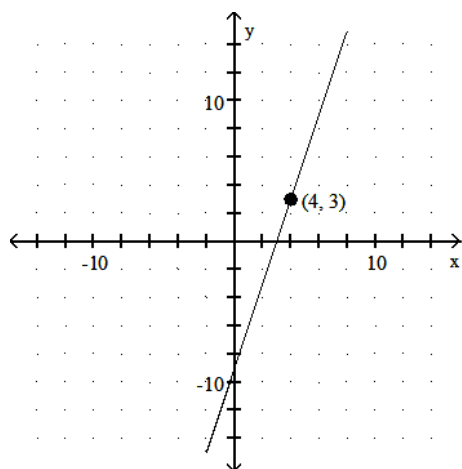
Graph the line having slope m and containing the given point. Do not find the equation of the line.

121) $m = -3$, $(4, 3)$

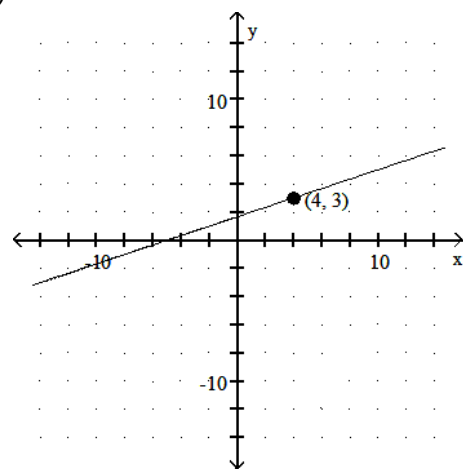
121) _____



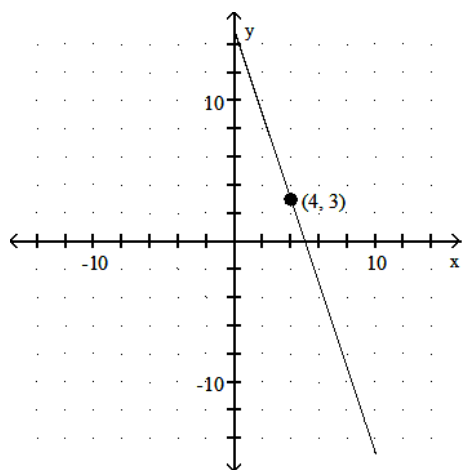
A)



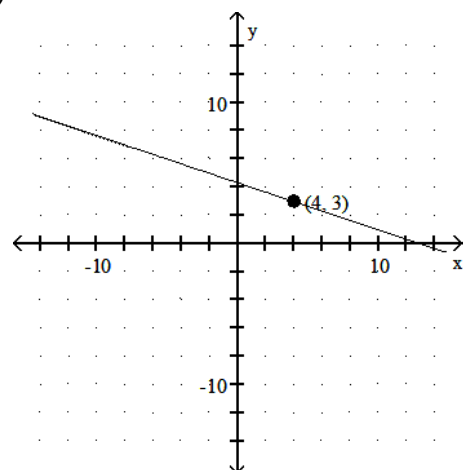
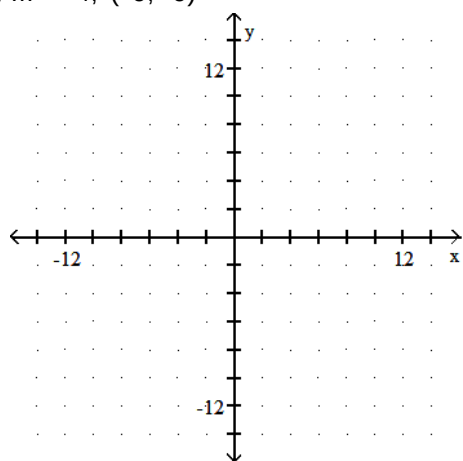
B)



C)

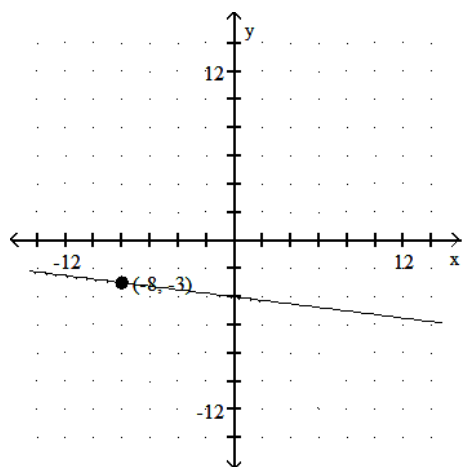


D)

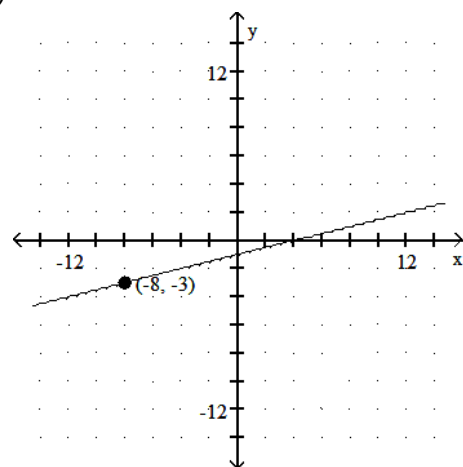
122) $m = -4$, $(-8, -3)$ 

122) _____

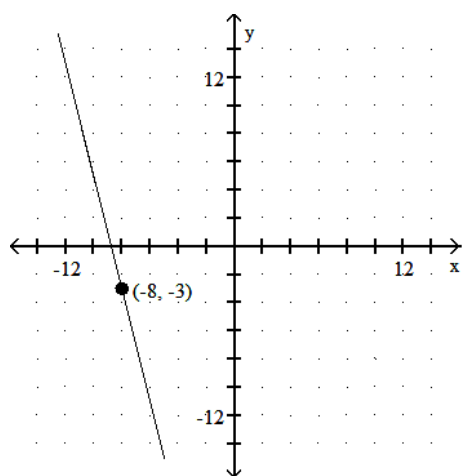
A)



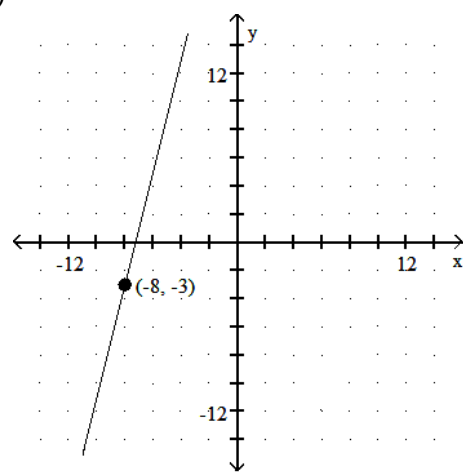
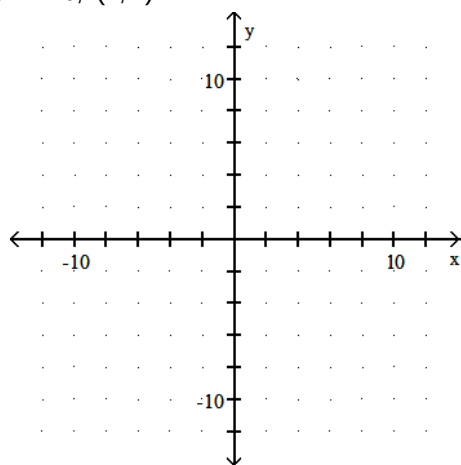
B)



C)

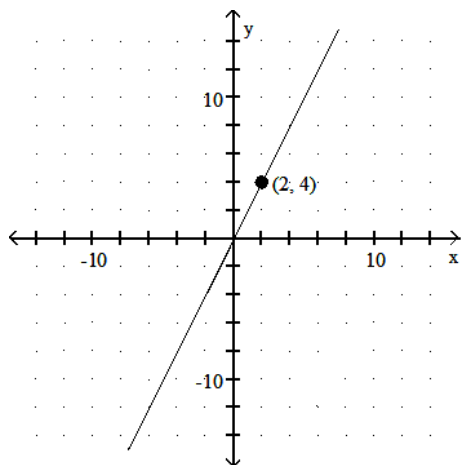


D)

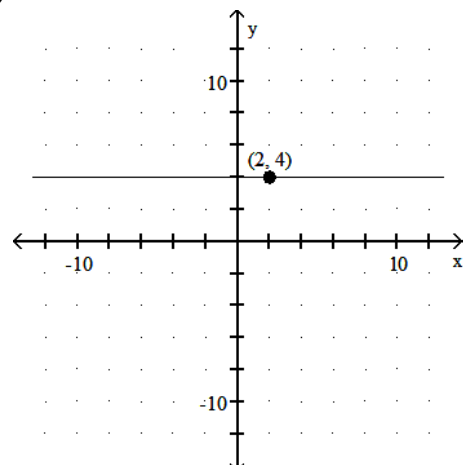
123) $m = 0$, $(2, 4)$ 

123) _____

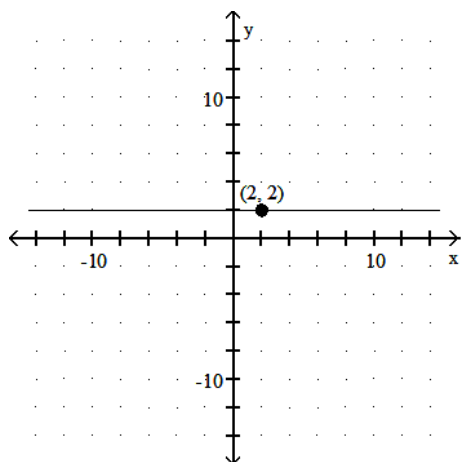
A)



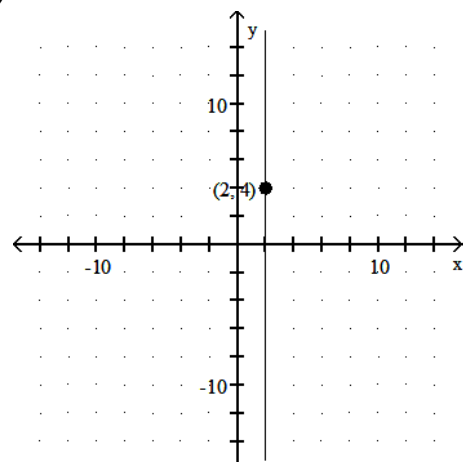
B)



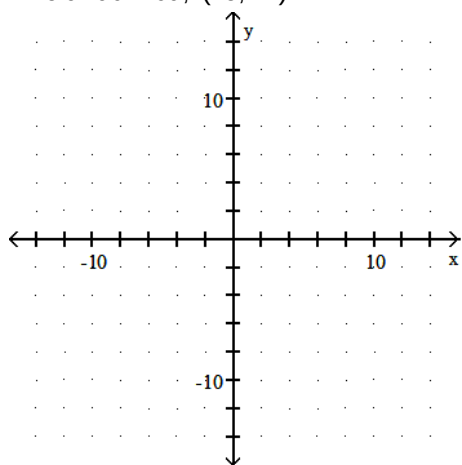
C)



D)

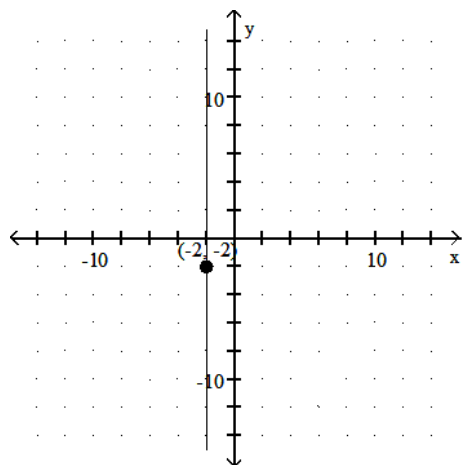


124) m is undefined, (-3, -2)

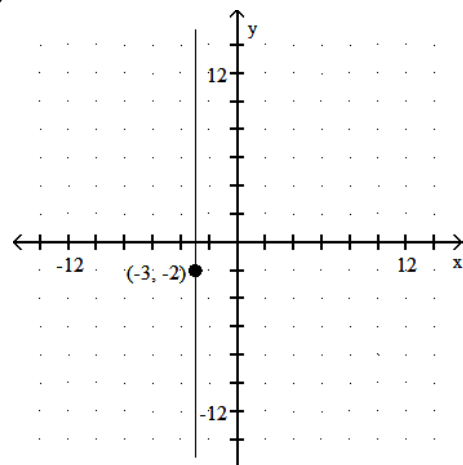


124) _____

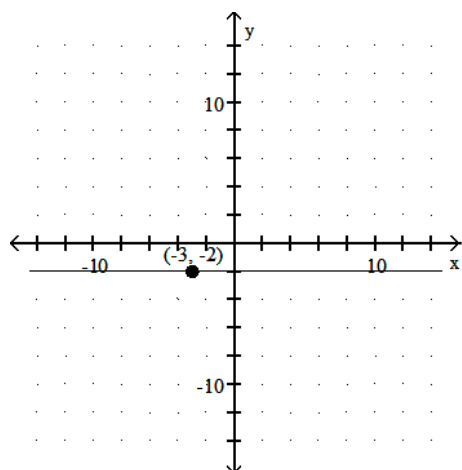
A)



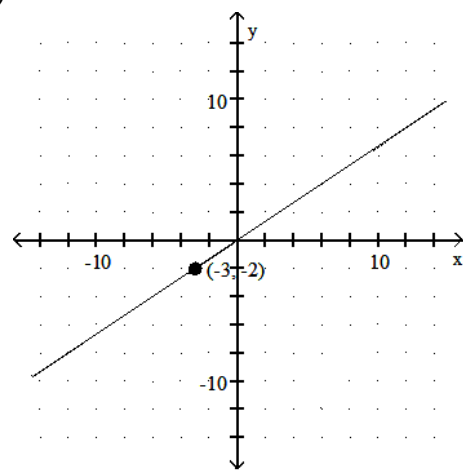
B)



C)

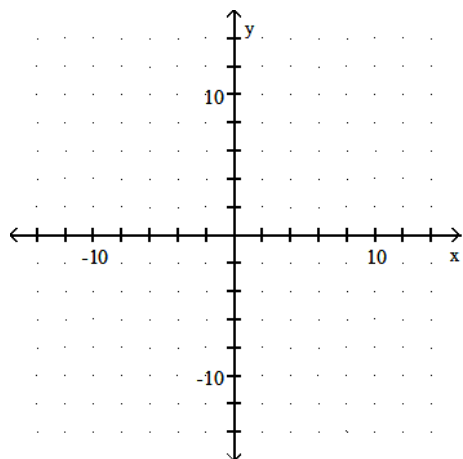


D)

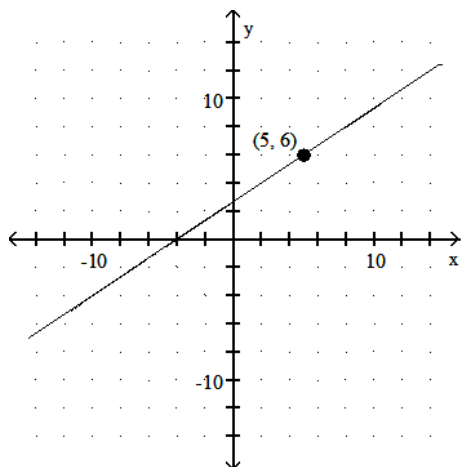


125) $m = \frac{2}{3}$, (5, 6)

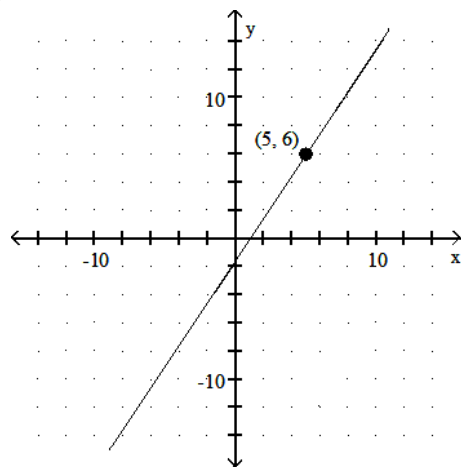
125) _____



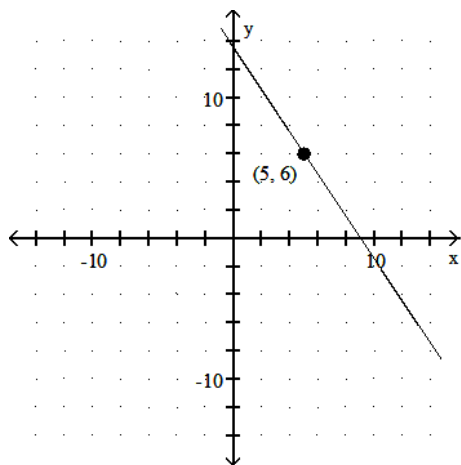
A)



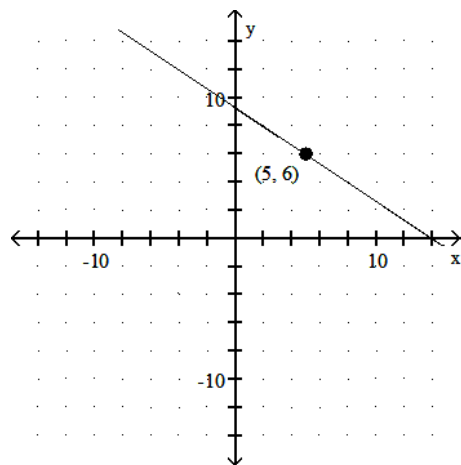
B)



C)

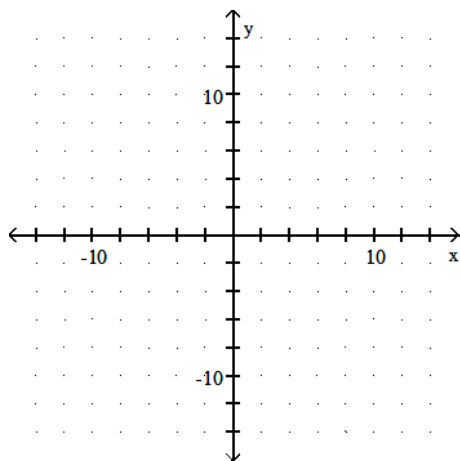


D)

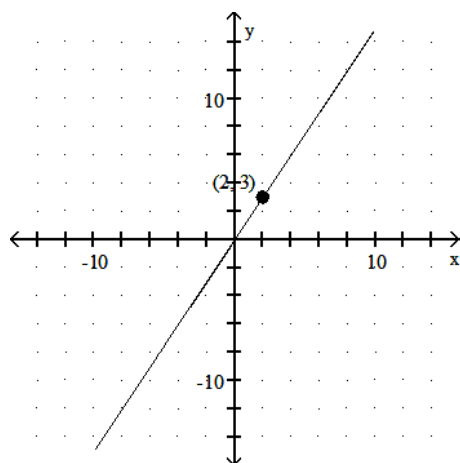


126) $m = -\frac{2}{3}, (2, 3)$

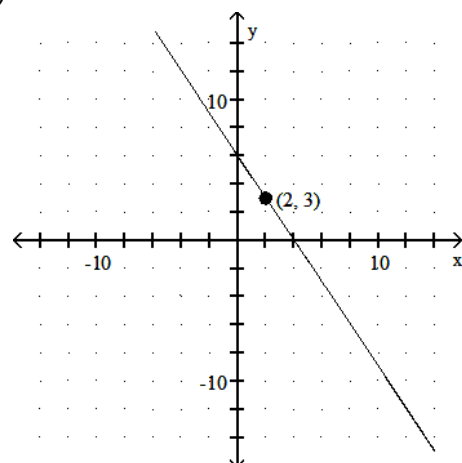
126) _____



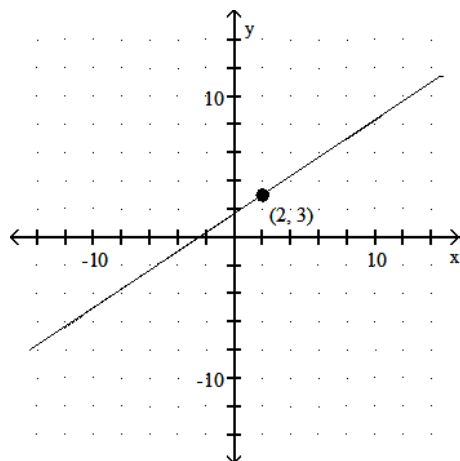
A)



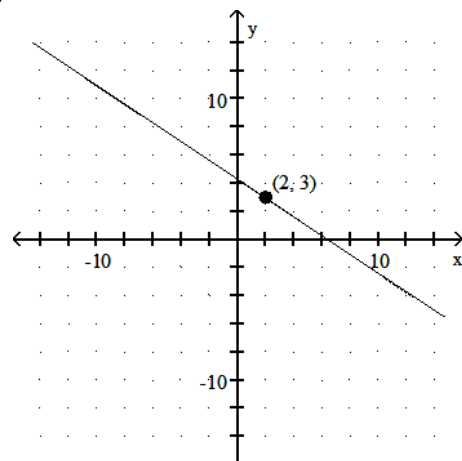
B)



C)



D)



Find an equation of the line with the given slope and containing the given point. Express your answer in slope-intercept form.

127) $m = 7, (0, 0)$

127) _____

A) $y = 7x$

B) $x = 7$

C) $y = \frac{1}{7}x$

D) $y = 7$

128) $m = -3, (8, 5)$

128) _____

A) $y - 5 = mx - 8$

B) $y = -3x + 29$

C) $y - 5 = x - 8$

D) $y = -3x - 29$

129) $m = -2, (-5, 4)$

129) _____

A) $y = -2x + 6$

B) $y - 4 = x + 5$

C) $y = -2x - 6$

D) $y - 4 = mx + 5$

130) $m = 3, (-2, -2)$

130) _____

A) $y = 3x + 4$

B) $y + 2 = mx + 2$

C) $y = 3x - 4$

D) $y + 2 = x + 2$

131) $m = \frac{7}{8}, (6, 3)$

131) _____

A) $y = \frac{7}{8}x + \frac{9}{4}$

B) $y = mx - \frac{9}{4}$

C) $y = \frac{7}{8}x - \frac{9}{4}$

D) $y = \frac{7}{8}x + 6$

- 132) $m = -\frac{2}{3}$, (3, 4) 132) _____
 A) $y = -\frac{2}{3}x - 6$ B) $y = \frac{2}{3}x - 6$ C) $y = -\frac{3}{2}x - 9$ D) $y = -\frac{2}{3}x + 6$
- 133) $m = -\frac{2}{7}$, (4, 5) 133) _____
 A) $y = \frac{2}{7}x - \frac{43}{7}$ B) $y = -\frac{7}{2}x - \frac{43}{2}$ C) $y = -\frac{2}{7}x + \frac{43}{7}$ D) $y = -\frac{2}{7}x - \frac{43}{7}$
- 134) $m = \frac{2}{3}$, (0, 5) 134) _____
 A) $y = -\frac{2}{3}x - 5$ B) $y = \frac{2}{3}x + 5$ C) $y = \frac{2}{3}x - 5$ D) $y = \frac{3}{2}x + \frac{15}{2}$
- 135) $m = -\frac{2}{5}$, (0, 4) 135) _____
 A) $y = -\frac{2}{5}x - 4$ B) $y = \frac{2}{5}x - 4$ C) $y = -\frac{2}{5}x + 4$ D) $y = -\frac{5}{2}x - 10$
- 136) $m = \frac{5}{7}$, (0, 2) 136) _____
 A) $y = -\frac{5}{7}x - 2$ B) $y = \frac{7}{5}x + \frac{14}{5}$ C) $y = \frac{5}{7}x + 2$ D) $y = \frac{5}{7}x - 2$
- 137) $m = 0$, (7, -6) 137) _____
 A) $y = -6$ B) $x = 7$ C) $y = 7$ D) $x = -6$
- 138) m is undefined, (1, -8) 138) _____
 A) $y = -8$ B) $y = 1$ C) $x = 1$ D) $x = -8$
- Find an equation of the line that has the given slope and contains the given point.
- 139) $m = -2$, (5, 6) 139) _____
 A) $y - 6 = mx - 5$ B) $y - 6 = x - 5$ C) $y = -2x - 16$ D) $y = -2x + 16$
- 140) $m = 2$, (-8, 4) 140) _____
 A) $y - 4 = mx + 8$ B) $y = 2x - 20$ C) $y - 4 = x + 8$ D) $y = 2x + 20$
- 141) $m = 3$, (-8, -5) 141) _____
 A) $y = 3x - 19$ B) $y + 5 = x + 8$ C) $y = 3x + 19$ D) $y + 5 = mx + 8$
- 142) $m = \frac{7}{8}$, (8, 5) 142) _____
 A) $y = mx - 2$ B) $y = \frac{7}{8}x - 2$ C) $y = \frac{7}{8}x + 2$ D) $y = \frac{7}{8}x + 8$

- 143) $m = -\frac{5}{9}, (2, 2)$ 143) _____
 A) $y = -\frac{5}{9}x + \frac{28}{9}$ B) $y = -\frac{5}{9}x - \frac{28}{9}$ C) $y = -\frac{9}{5}x - \frac{28}{5}$ D) $y = \frac{5}{9}x - \frac{28}{9}$
- 144) $m = 0, (-7, 1)$ 144) _____
 A) $y = 1$ B) $y = -7$ C) $x = 1$ D) $x = -7$
- 145) m is undefined, $(4, -7)$ 145) _____
 A) $x = -7$ B) $x = 4$ C) $x = 3$ D) $x = 0$
- Find an approximate equation of the line that has the given slope and contains the given point. Round the constant term to two decimal places.
- 146) $m = 5.06, (3.49, -3.71)$ 146) _____
 A) $y = 5.06x - 22.26$ B) $y = 5.06x + 21.37$
 C) $y = 5.06x + 22.26$ D) $y = 5.06x - 21.37$
- 147) $m = -1.8, (-1.5, 9.3)$ 147) _____
 A) $y = -1.8x - 12$ B) $y = 1.8x + 6.6$ C) $y = 1.8x + 15.24$ D) $y = -1.8x + 6.6$
- Find an equation of the line passing through the two given points.
- 148) $(5, 37)$ and $(2, 19)$ 148) _____
 A) $y = \frac{1}{6}x + \frac{217}{6}$ B) $y = 6x + 7$ C) $y = -\frac{1}{6}x + \frac{227}{6}$ D) $y = -6x + 67$
- 149) $(6, -38)$ and $(-7, 27)$ 149) _____
 A) $y = 5x - 68$ B) $y = -5x - 8$ C) $y = -\frac{1}{5}x - \frac{184}{5}$ D) $y = \frac{1}{5}x - \frac{196}{5}$
- 150) $(5, 5)$ and $(7, 8)$ 150) _____
 A) $y = \frac{3}{2}(x - 5)$ B) $y = \frac{3}{2}x - \frac{5}{2}$ C) $y = mx - \frac{5}{2}$ D) $y = -\frac{3}{2}x - \frac{5}{2}$
- 151) $(-9, -2)$ and $(-9, -1)$ 151) _____
 A) $y = x + 9$ B) $y = -9$ C) $x = -9$ D) $y = x - 9$
- 152) $(-8, -9)$ and $(-4, -9)$ 152) _____
 A) $x = -9$ B) $y = -9$ C) $y = x - 9$ D) $y = 0$
- 153) $(-6, -2)$ and $(-2, -4)$ 153) _____
 A) $y = -\frac{1}{2}x + 6$ B) $y = -2x - 5$ C) $y = -\frac{1}{2}x - 5$ D) $y = \frac{1}{2}x - 5$
- 154) $(-3, -6)$ and $(5, -6)$ 154) _____
 A) $x = -6$ B) $y = -6$ C) $y = x - 6$ D) $y = 0$

Find an approximate equation of the line passing through the two given points. Round the slope and the constant term to two decimal places.

155) (2.4, 7.2) and (5, 3.2)

A) $y = -0.65x + 8.52$

C) $y = -1.54x + 10.9$

B) $y = -1.54x + 32.31$

D) $y = 1.41x + 6.68$

155) _____

156) (-1.58, -3.31) and (5.79, 2.64)

A) $y = 0.81x - 2.05$

C) $y = 1.24x - 2.52$

B) $y = 0.81x - 3.17$

D) $y = -0.16x - 3.56$

156) _____

Find an equation of the line that contains the given point and is parallel to the given line.

157) $y = -7x + 4$, (4, -4)

A) $y = 7x - 24$

B) $y = -7x + 24$

C) $y = -\frac{1}{7}x - \frac{24}{7}$

D) $y = -7x - 24$

157) _____

158) $y = -\frac{1}{7}x + 3$, (4, 2)

A) $y = -\frac{1}{7}x - \frac{18}{7}$

B) $y = -\frac{1}{7}x + \frac{18}{7}$

C) $y = -7x - 18$

D) $y = \frac{1}{7}x - \frac{18}{7}$

158) _____

159) $3x + y = 4$, (2, 4)

A) $y = -3x + 10$

B) $y = 3x - 10$

C) $y = -\frac{1}{3}x - \frac{10}{3}$

D) $y = -3x - 10$

159) _____

160) $y = -4$, (1, 8)

A) $y = 8$

B) $y = -4$

C) $y = 1$

D) $y = -8$

160) _____

161) $x = 9$, (1, 2)

A) $x = 1$

B) $x = 2$

C) $x = -2$

D) $y = 9$

161) _____

162) $y = 3x - 3$, (1, 5)

A) $y = 3x + 5$

B) $y = -3x + 2$

C) $y = 3x + 2$

D) $y = 3x + 8$

162) _____

163) $y = -4x$, (4, 4)

A) $y = 4x - 20$

B) $y = -4x - 20$

C) $y = -4x + 20$

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

163) _____

164) $6x + 7y = 111$, (8, 12)

A) $y = -\frac{7}{6}x + 12$

B) $y = -\frac{6}{7}x + \frac{132}{7}$

C) $y = -\frac{7}{6}x + 111$

D) $y = \frac{6}{7}x + \frac{132}{7}$

164) _____

165) $7x - 8y = 10$, (4, 7)

A) $y = \frac{7}{8}x - \frac{7}{2}$

B) $y = \frac{7}{8}x + \frac{7}{2}$

C) $y = -\frac{7}{8}x + \frac{7}{2}$

D) $y = \frac{7}{8}x + 4$

165) _____

166) $-3x - y = 5$, (-5, -8)

A) $y = -3x - 23$

B) $y + 8 = mx + 5$

C) $y = -3x + 23$

D) $y + 8 = x + 5$

166) _____

Find an equation of the line that contains the given point and is perpendicular to the given line.

167) $y = 4x - 2$, $(-2, 2)$

167) _____

A) $y = \frac{1}{4}x + \frac{3}{2}$

B) $y = 4x + \frac{3}{2}$

C) $y = -\frac{1}{4}x + \frac{3}{2}$

D) $y = -4x + \frac{3}{2}$

168) $y = \frac{1}{8}x + 4$, $(3, 4)$

168) _____

A) $y = -8x - 28$

B) $y = 8x - 28$

C) $y = -\frac{1}{8}x - \frac{7}{2}$

D) $y = -8x + 28$

169) $-8x + y = 4$, $(3, 3)$

169) _____

A) $y = \frac{1}{8}x - \frac{27}{8}$

B) $y = -\frac{1}{8}x + \frac{27}{8}$

C) $y = -\frac{1}{8}x - \frac{27}{8}$

D) $y = -8x - 27$

170) $x = 3$, $(4, 1)$

170) _____

A) $y = -1$

B) $y = 1$

C) $y = 4$

D) $y = 3$

171) $y = 7$, $(5, 4)$

171) _____

A) $y = -4$

B) $x = 7$

C) $x = 5$

D) $y = 4$

172) $x + 5y = -5$, $(5, 5)$

172) _____

A) $y = 5x - 30$

B) $y = 5x - 20$

C) $y = \frac{1}{5}x + 4$

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

173) $7x + 2y = 68$, $(-6, 11)$

173) _____

A) $y = -\frac{7}{2}x + 68$

B) $y = -\frac{7}{2}x + 11$

C) $y = \frac{2}{7}x + \frac{89}{7}$

D) $y = -\frac{2}{7}x + \frac{89}{7}$

Use the table to answer the question.

174) Let y be the value of a house (in thousands of dollars), x years after it is purchased. Some pairs of values are listed in the table below.

174) _____

Age (years)	Value (thousands of dollars)
x	y
0	73
1	75
2	77
3	79
4	81
5	83

Find an equation that describes the relationship between x and y .

A) $y = -2x + 73$

B) $y = 2x$

C) $y = 2x - 73$

D) $y = 2x + 73$

175) Let y be the value of a computer (in hundreds of dollars), when it is x years old. Some pairs of values are listed in the table below.

175) _____

Age (years)	Value (hundreds of dollars)
x	y
0	8
1	7.75
2	7.5
3	7.25
4	7
5	6.75

Find an equation that describes the relationship between x and y .

A) $y = -0.25x$

B) $y = -0.25x + 8$

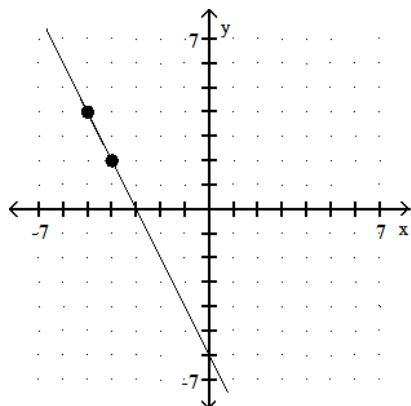
C) $y = 0.25x - 8$

D) $y = -0.25x - 8$

Find an equation for the line.

176)

176) _____



A) $y = -2x - 6$

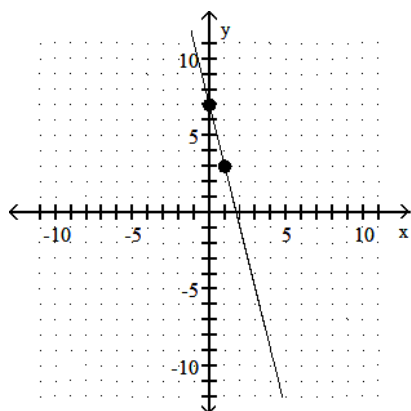
B) $y = -2x + 6$

C) $y = -\frac{1}{2}x - \frac{3}{2}$

D) $y = -2x + 3$

177)

177) _____



A) $y = 7x - 4$

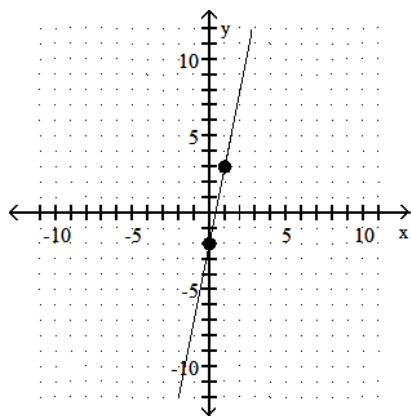
B) $y = -7x - 4$

C) $y = -4x + 7$

D) $y = 4x - 7$

178)

178) _____



A) $y = 5x - 2$

B) $y = -5x + 2$

C) $y = -5x - 2$

D) $y = 2x + 5$

Solve the problem.

179) Some values for a relation are given in the table. Is the relation a function?

179) _____

x	y
1	2
2	5
3	8
3	11
4	14

A) Yes

B) No

180) Some values for a relation are given in the table. Is the relation a function?

180) _____

x	y
5	3
6	4
7	6
8	6
9	15

A) Yes

B) No

181) Some values for a relation are given in the table. Is the relation a function?

181) _____

x	y
1	5
2	9
3	2
3	4
4	7

A) Yes

B) No

182) Some values for a relation are given in the table. Is the relation a function?

182) _____

x	y
1	2
2	7
3	7
4	1
5	9

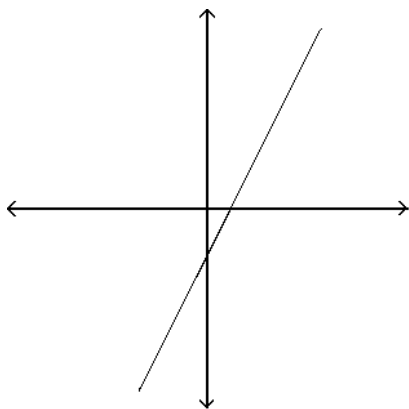
A) Yes

B) No

Determine whether the graph is the graph of a function.

183)

183) _____

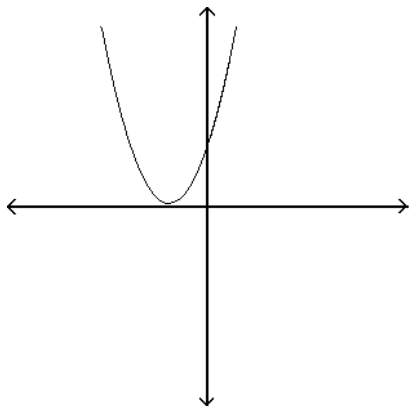


A) function

B) not a function

184)

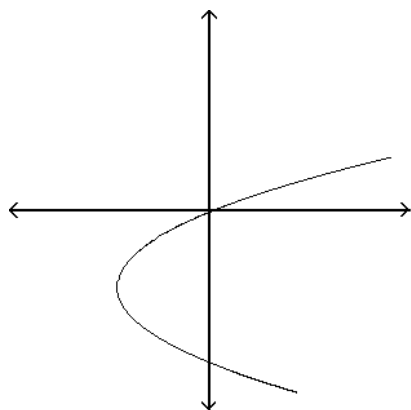
184) _____



A) function

B) not a function

185)

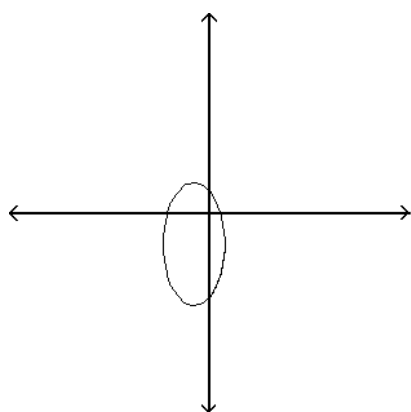


A) function

B) not a function

185) _____

186)

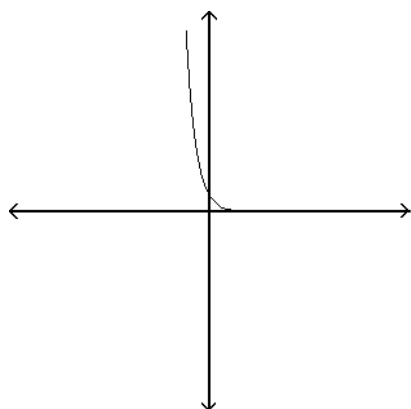


A) function

B) not a function

186) _____

187)

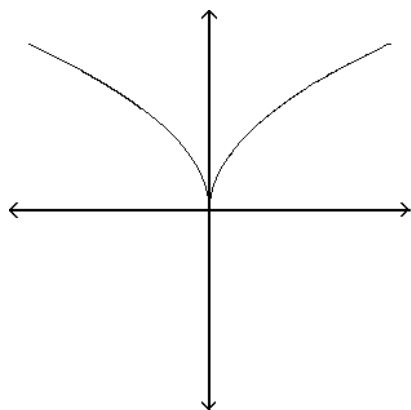


A) function

B) not a function

187) _____

188)

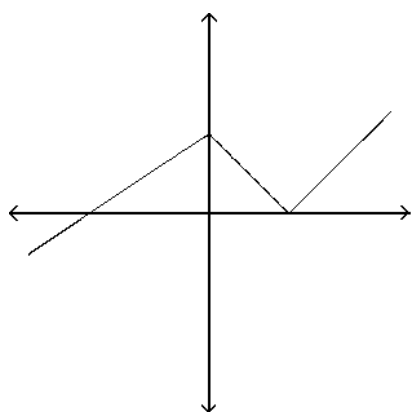


A) function

B) not a function

188) _____

189)

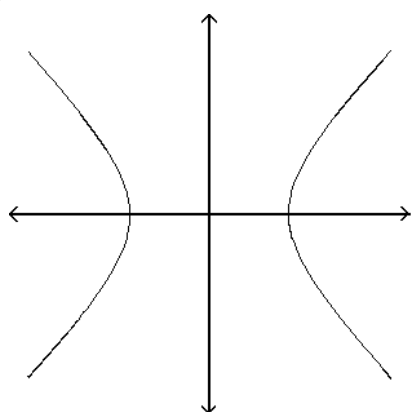


A) function

B) not a function

189) _____

190)

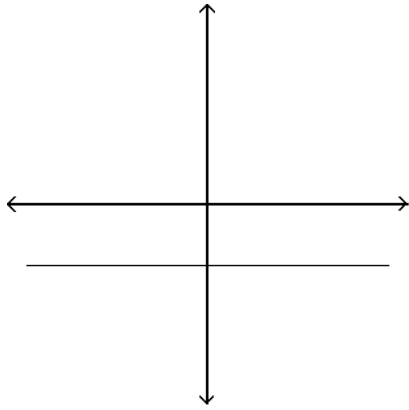


A) function

B) not a function

190) _____

191)

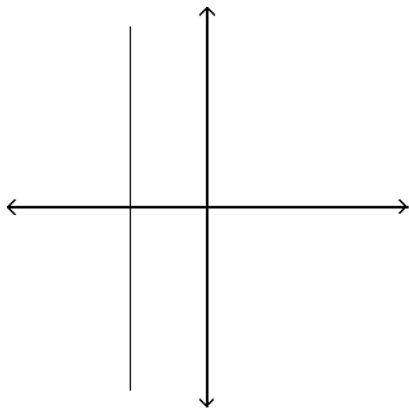


A) function

B) not a function

191) _____

192)



A) function

B) not a function

192) _____

Determine whether the relation is a function.

193) $y = 3x - 2$

A) function

B) not a function

193) _____

194) $2x - 3y = 6$

A) function

B) not a function

194) _____

195) $x = -3$

A) function

B) not a function

195) _____

196) $y = x^3$

A) function

B) not a function

196) _____

197) $x = y^2$

A) function

B) not a function

197) _____

198) $2x + 8y - 3 = 5 + 8(y - 1)$

A) function

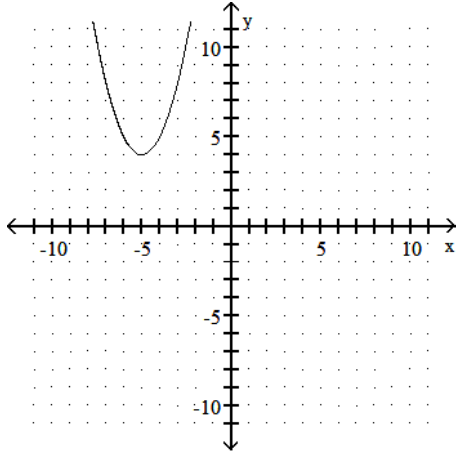
B) not a function

198) _____

Find the domain and the range of the relation.

199)

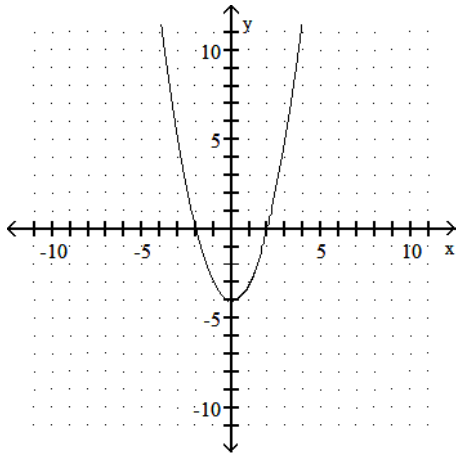
199) _____



- A) domain: all real numbers; range: $y \leq 4$
- B) domain: $x \geq 4$; range: all real numbers
- C) domain: all real numbers; range: $y \geq 4$
- D) domain: all real numbers; range: all real numbers

200)

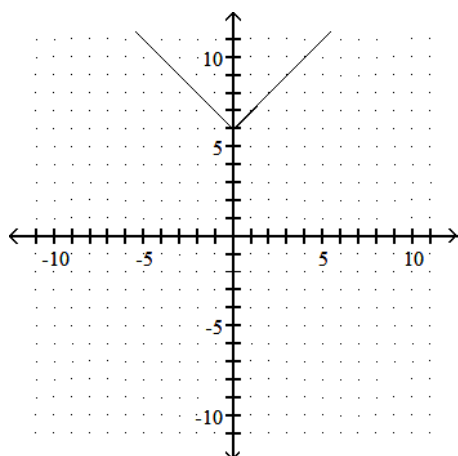
200) _____



- A) domain: $x \geq -4$; range: all real numbers
- B) domain: all real numbers; range: $y \geq -4$
- C) domain: all real numbers; range: all real numbers
- D) domain: all real numbers; range: $y \leq -4$

201)

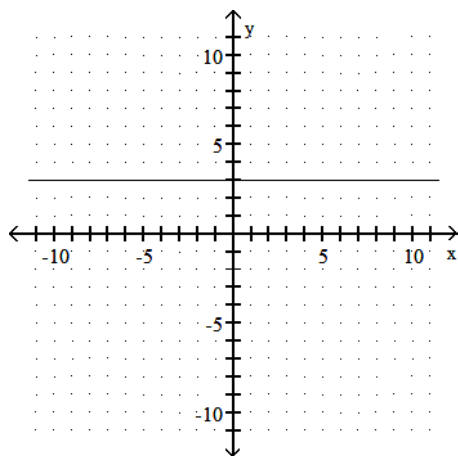
201) _____



- A) domain: all real numbers; range: all real numbers
- B) domain: $x \geq 0$; range: all real numbers
- C) domain: all real numbers; range: $y \geq 6$
- D) domain: $x \geq 6$; range: all real numbers

202)

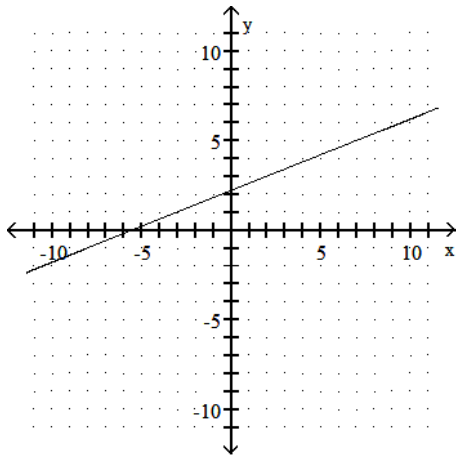
202) _____



- A) domain: all real numbers; range: all real numbers
- B) domain: all real numbers; range: $y = 3$
- C) domain: $x = 3$; range: all real numbers
- D) domain: $x = 3$; range: $y = 3$

203)

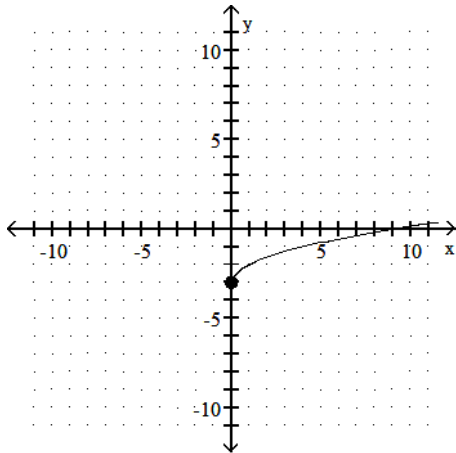
203) _____



- A) domain: $x \leq 0$; range: $y \leq 0$
- B) domain: $x \geq 0$; range: $y \geq 0$
- C) domain: all real numbers; range: all real numbers
- D) Domain: all real numbers; range: $y \geq 0$

204)

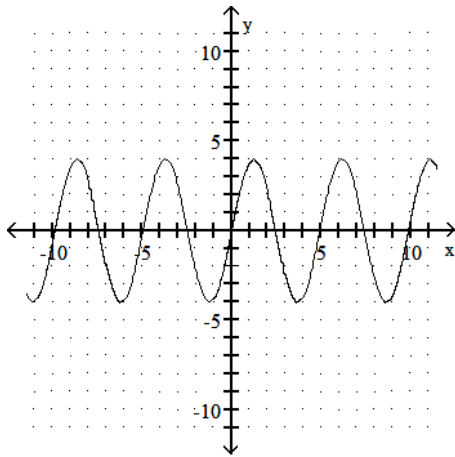
204) _____



- A) domain: all real numbers; range: $y \geq -3$
- B) domain: $x \geq 0$; range: all real numbers
- C) domain: $x \geq 0$; range: $y \geq 0$
- D) domain: $x \geq 0$; range: $y \geq -3$

205)

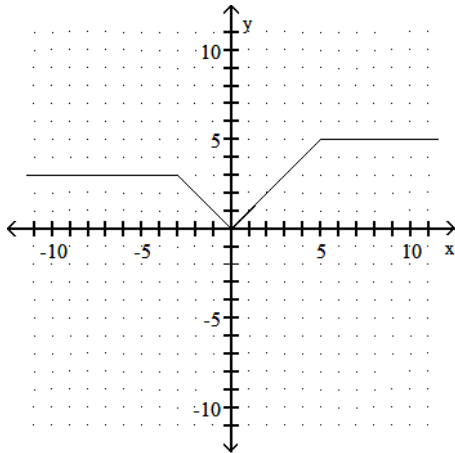
205) _____



- A) domain: all real numbers; range: all real numbers
 B) domain: $-4 \leq x \leq 4$; range: all real numbers
 C) domain: all real numbers; range: $0 \leq y \leq 4$
 D) domain: all real numbers; range: $-4 \leq y \leq 4$

206)

206) _____



- A) domain: all real numbers; range: $3 \leq x \leq 5$
 B) domain: all real numbers; range: $0 \leq y \leq 5$
 C) domain: $0 \leq y \leq 5$; range: all real numbers
 D) domain: all real numbers; range: all real numbers

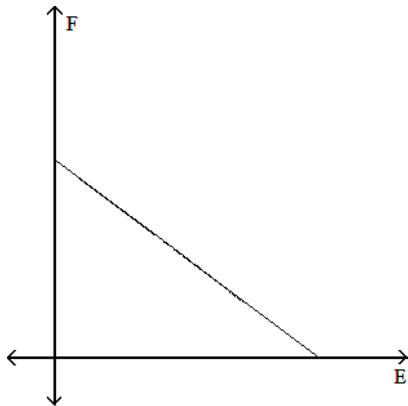
Answer Key

Testname: UNTITLED24

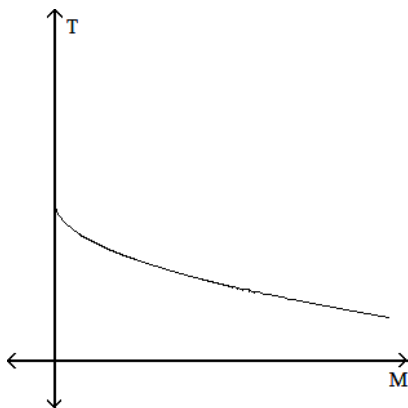
1) A

2) A

3)



4)



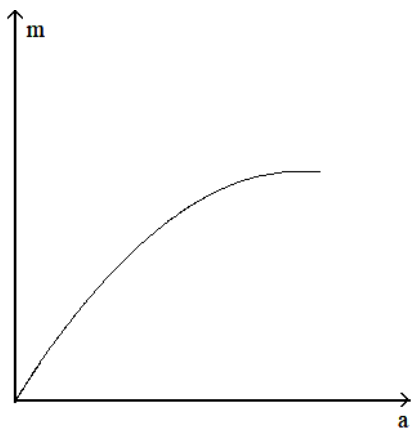
5) A

6) A

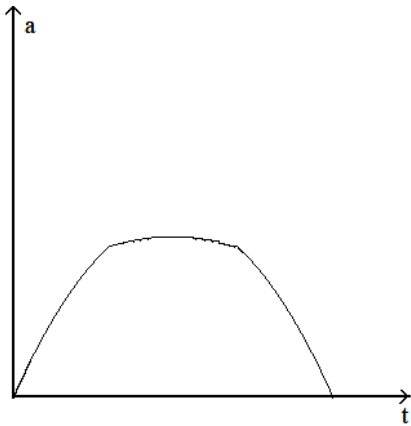
7) A

8) B

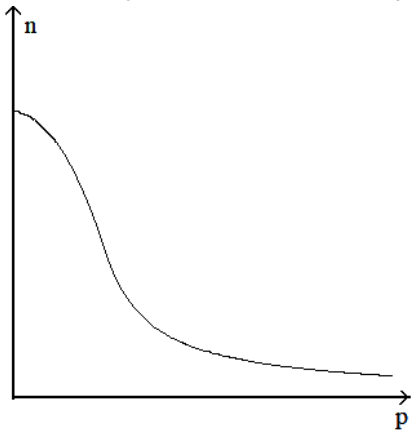
9) There are many correct graphs. One possibility is:



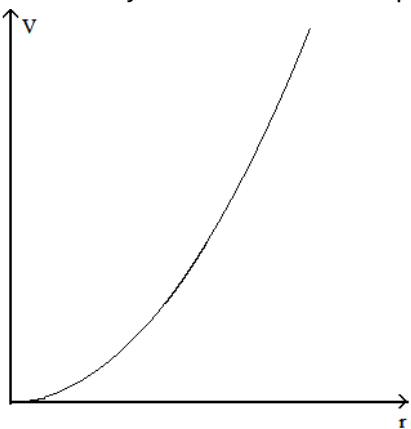
10) There are many correct graphs. One possibility is:



11) There are many correct answers. One possibility is:



12) There are many correct answers. One possible answer is:



13) A

14) D

15) D

16) C

17) A

18) C

Answer Key

Testname: UNTITLED24

- 19) A
- 20) A
- 21) D
- 22) C
- 23) B
- 24) C
- 25) B
- 26) D
- 27) D
- 28) D
- 29) A
- 30) A
- 31) C
- 32) B
- 33) B
- 34) A
- 35) D
- 36) B
- 37) C
- 38) B
- 39) A
- 40) C
- 41) B
- 42) B
- 43) A
- 44) D
- 45) A
- 46) D
- 47) C
- 48) D
- 49) D
- 50) C
- 51) A
- 52) D
- 53) C
- 54) B
- 55) C
- 56) C
- 57) C
- 58) C
- 59) B
- 60) A
- 61) D
- 62) C
- 63) B
- 64) D
- 65) B

Answer Key

Testname: UNTITLED24

- 66) i) $\frac{1}{2}$
ii) 1
iii) -4
iv) 4
- 67) i) A, B, E
ii) E
iii) None of the points
iv) C
- 68) B
69) A
70) C
71) D
72) C
73) B
74) A
75) B
76) C
77) D
78) A
79) B
80) D
81) A
82) B
83) C
84) A
85) A
86) C
87) B
88) B
89) B
90) B
91) B
92) B
93) D
94) A
95) B
96) C
97) A
98) B
99) D
100) C
101) D
102) B
103) A
104) D
105) C
106) C
107) slope: negative
y-coordinate of y-intercept: zero

Answer Key

Testname: UNTITLED24

- 108) B
- 109) A
- 110) C
- 111) A
- 112) B
- 113) C
- 114) A
- 115) B
- 116) C
- 117) B
- 118) D
- 119) C
- 120) D
- 121) C
- 122) C
- 123) B
- 124) B
- 125) A
- 126) D
- 127) A
- 128) B
- 129) C
- 130) A
- 131) C
- 132) D
- 133) C
- 134) B
- 135) C
- 136) C
- 137) A
- 138) C
- 139) D
- 140) D
- 141) C
- 142) B
- 143) A
- 144) A
- 145) B
- 146) D
- 147) D
- 148) B
- 149) B
- 150) B
- 151) C
- 152) B
- 153) C
- 154) B
- 155) C
- 156) A
- 157) B

Answer Key

Testname: UNTITLED24

- 158) B
- 159) A
- 160) A
- 161) A
- 162) C
- 163) C
- 164) B
- 165) B
- 166) A
- 167) C
- 168) D
- 169) B
- 170) B
- 171) C
- 172) B
- 173) C
- 174) D
- 175) B
- 176) A
- 177) C
- 178) A
- 179) B
- 180) A
- 181) B
- 182) A
- 183) A
- 184) A
- 185) B
- 186) B
- 187) A
- 188) A
- 189) A
- 190) B
- 191) A
- 192) B
- 193) A
- 194) A
- 195) B
- 196) A
- 197) B
- 198) B
- 199) C
- 200) B
- 201) C
- 202) B
- 203) C
- 204) D
- 205) D
- 206) B