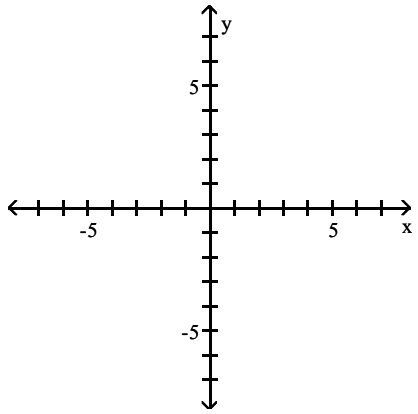
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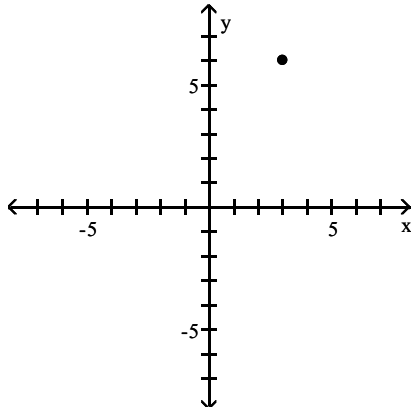
MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

Plot the ordered pair in the Cartesian plane, and state in which quadrant or on which axis it lies.

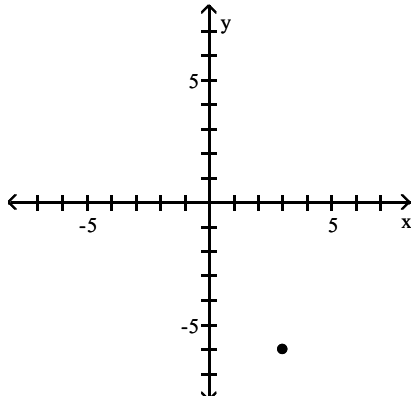
1) (3, 6)



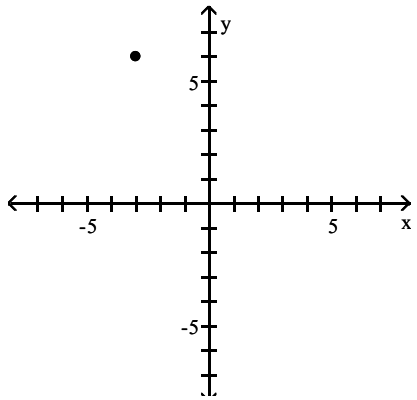
A) Quadrant I



B) Quadrant IV

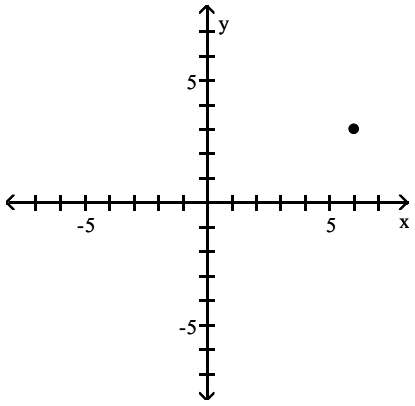


C) Quadrant II



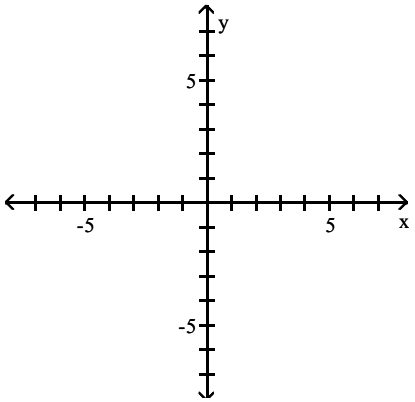
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D) Quadrant I

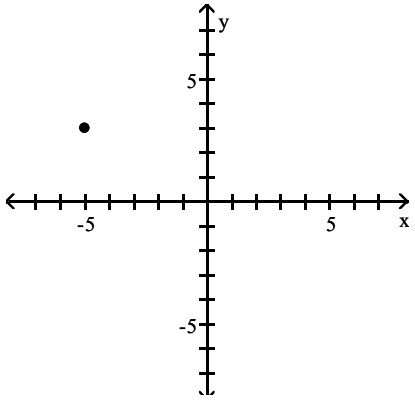


Answer: A
Objective: (2.1) Plotting Ordered Pairs

2) (–5, 3)

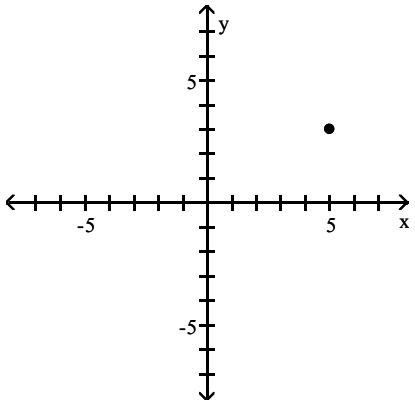


A) Quadrant II

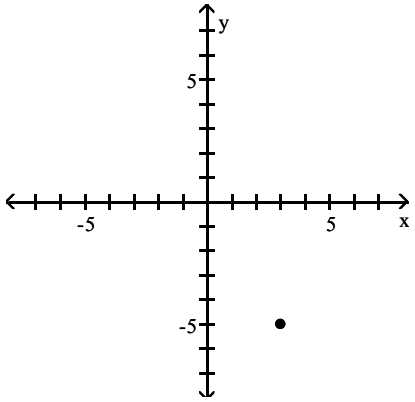


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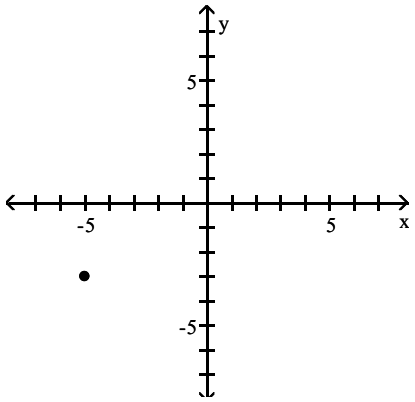
B) Quadrant I



C) Quadrant IV



D) Quadrant III

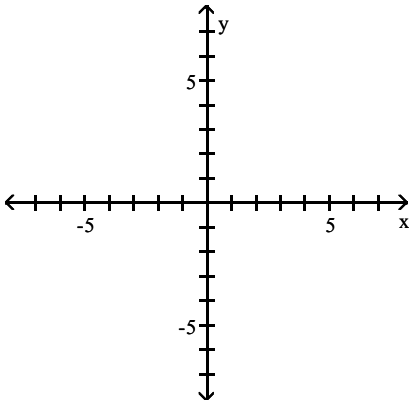


Answer: A

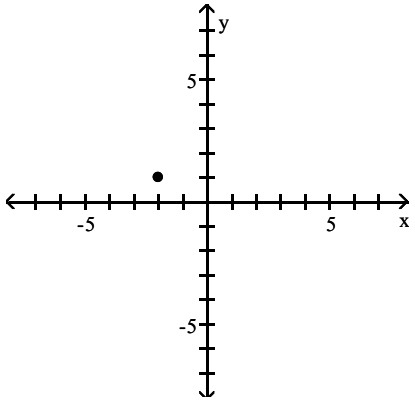
Objective: (2.1) Plotting Ordered Pairs

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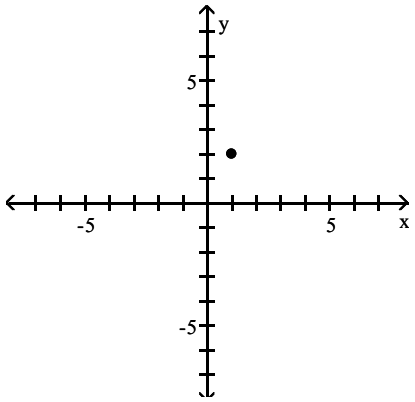
3) (1, –2)



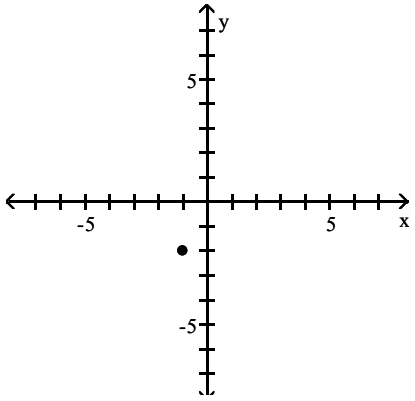
A) Quadrant II



B) Quadrant I

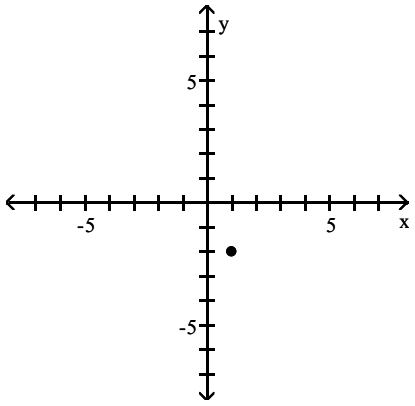


C) Quadrant III



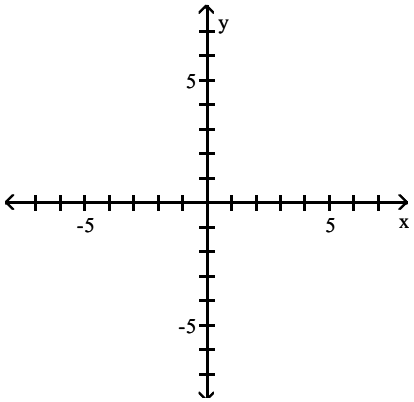
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D) Quadrant IV

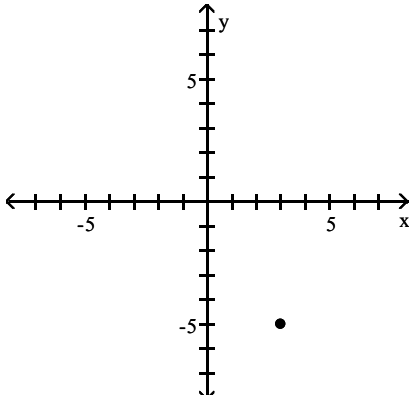


Answer: D
Objective: (2.1) Plotting Ordered Pairs

4) (–3, –5)

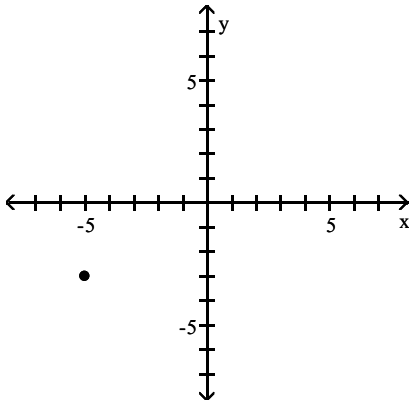


A) Quadrant IV

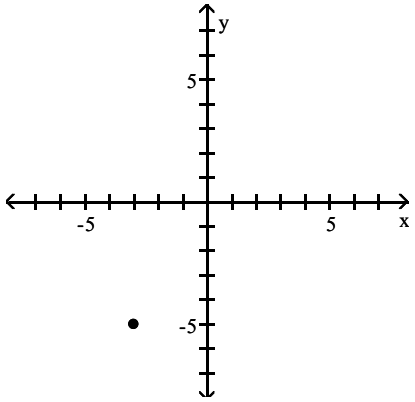


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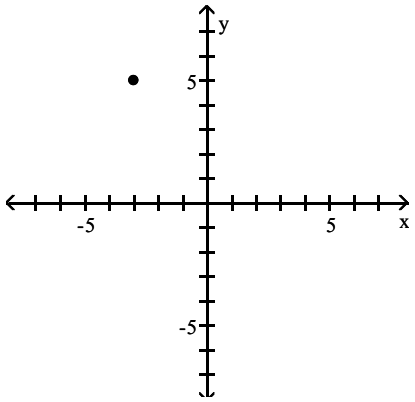
B) Quadrant III



C) Quadrant III



D) Quadrant II

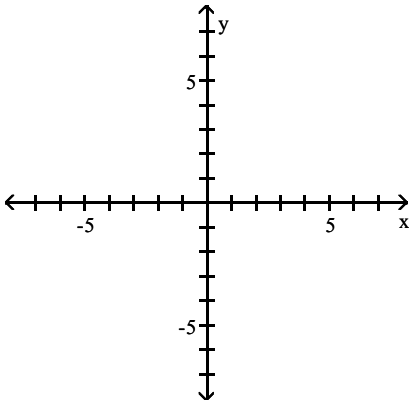


Answer: C

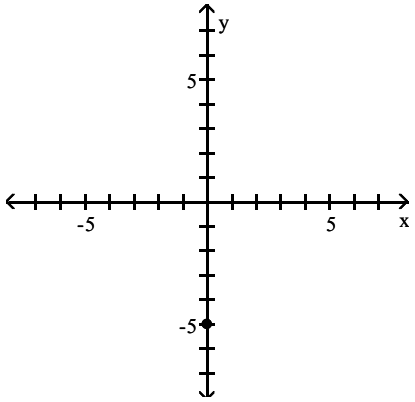
Objective: (2.1) Plotting Ordered Pairs

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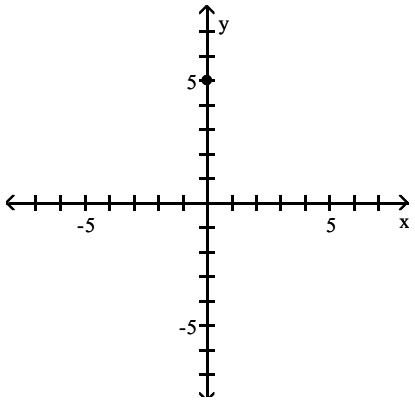
5) (0, –5)



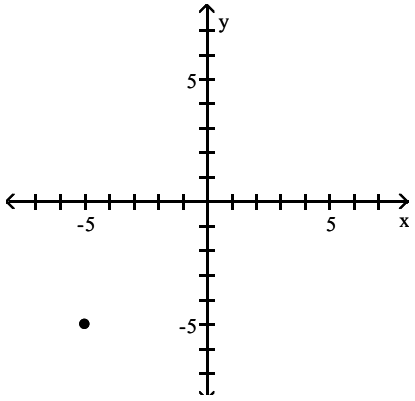
A) y–axis



B) y–axis

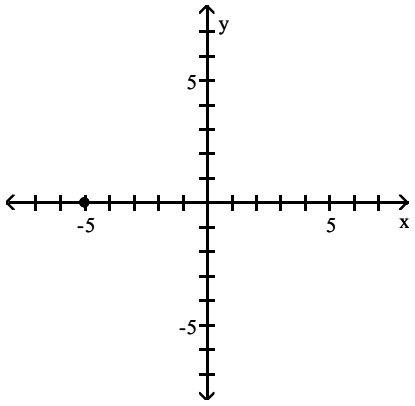


C) Quadrant II



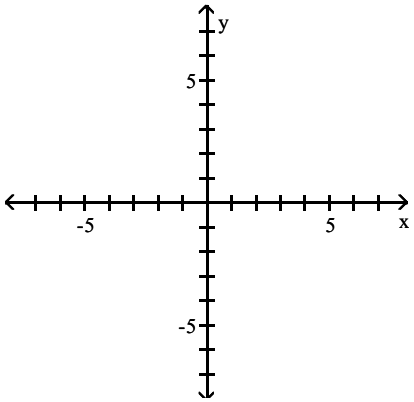
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D) x–axis

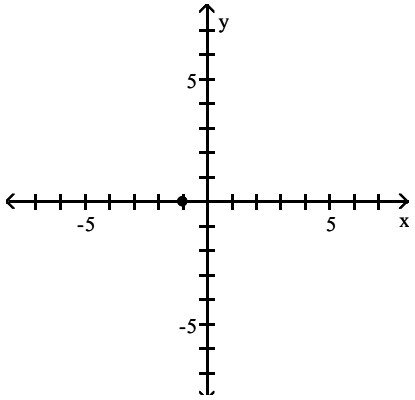


Answer: A
Objective: (2.1) Plotting Ordered Pairs

6) (–1, 0)

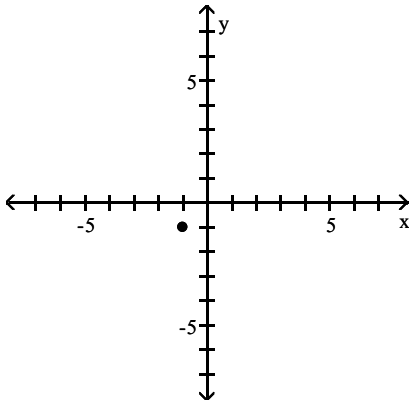


A) x–axis

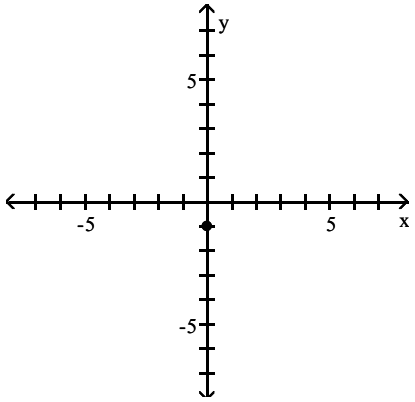


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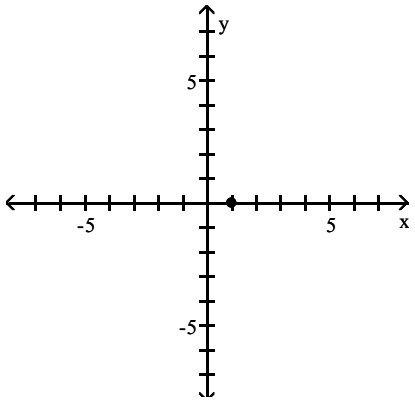
B) Quadrant II



C) y–axis



D) x–axis

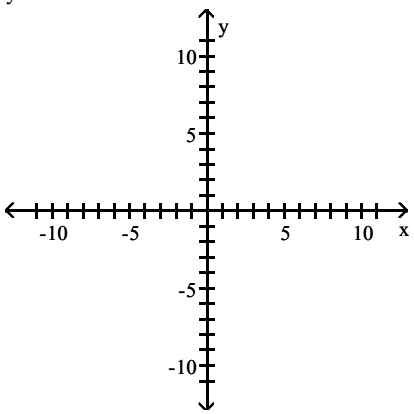


Answer: A
Objective: (2.1) Plotting Ordered Pairs

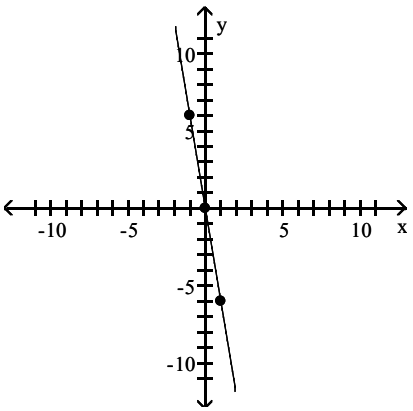
Sketch the graph for the equation by plotting points.

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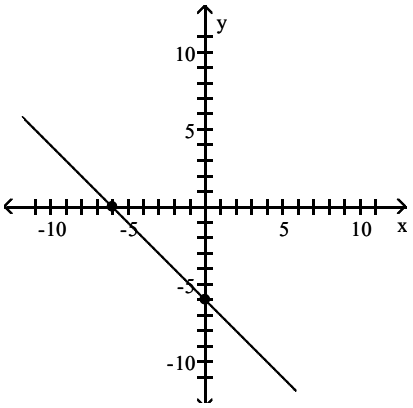
7) y = x – 6



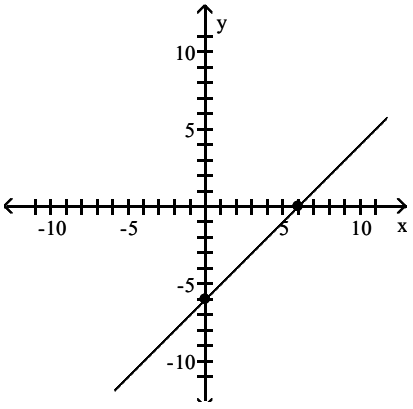
A)



B)

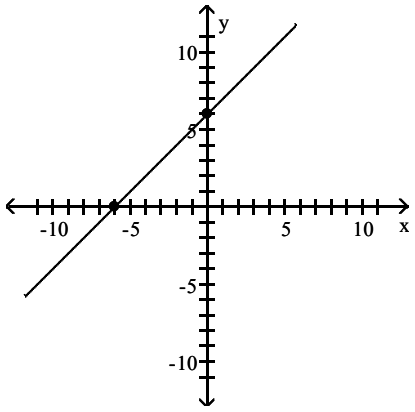


C)



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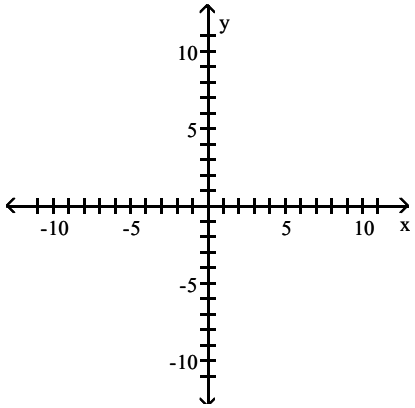
D)



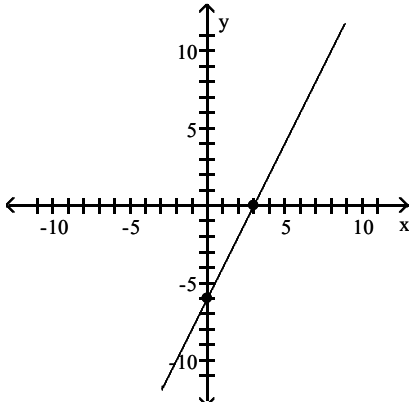
Answer: C

Objective: (2.1) Graphing Equations by Plotting Points

8) $y = 2x - 6$

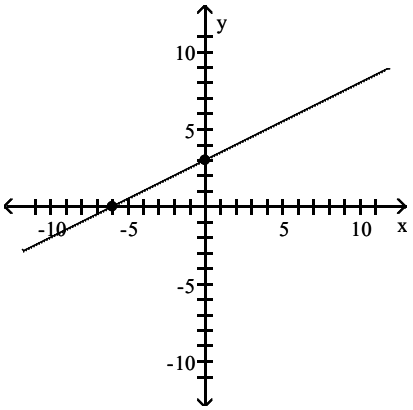


A)

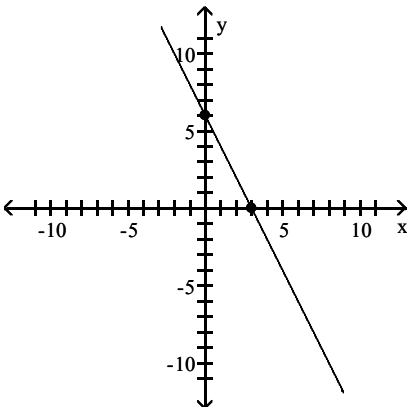


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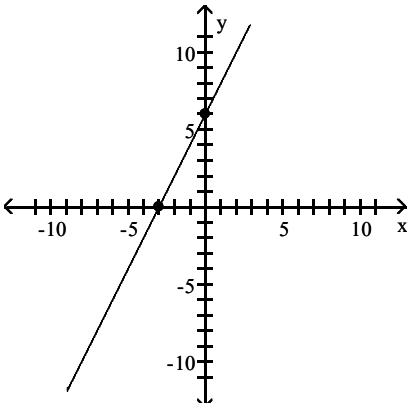
B)



C)



D)

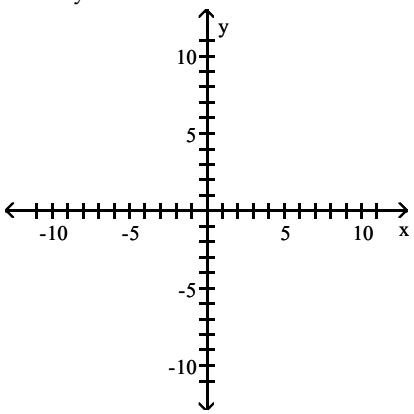


Answer: A

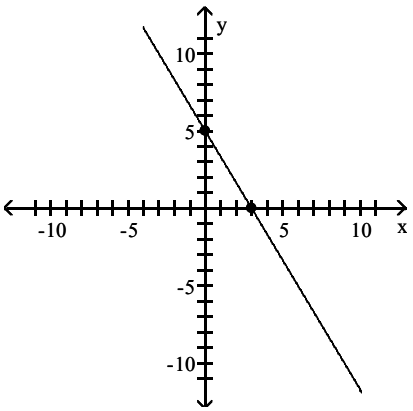
Objective: (2.1) Graphing Equations by Plotting Points

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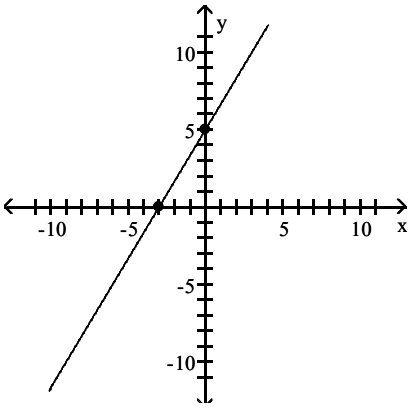
9) $5x + 3y = 15$



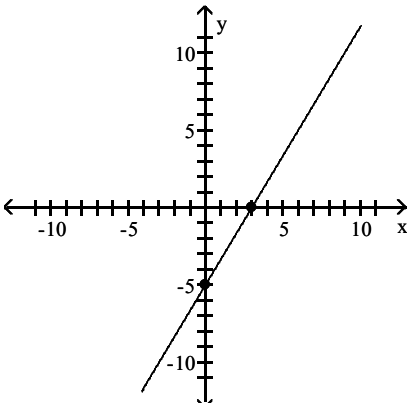
A)



B)

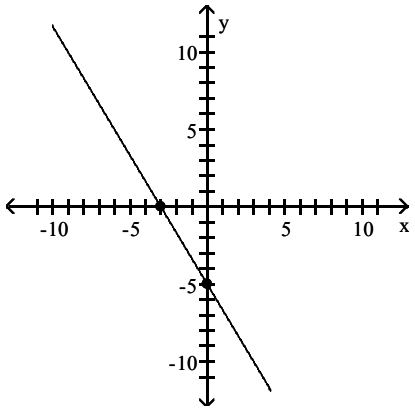


C)



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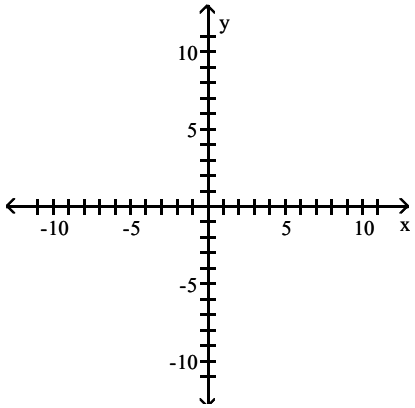
D)



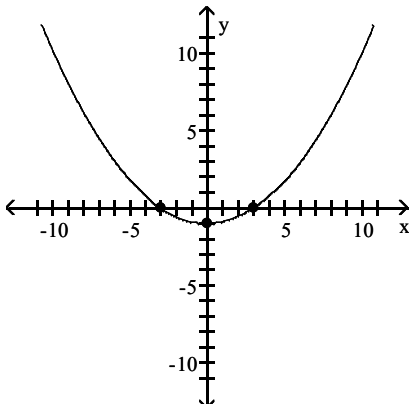
Answer: A

Objective: (2.1) Graphing Equations by Plotting Points

10) $x^2 + 9y = 9$

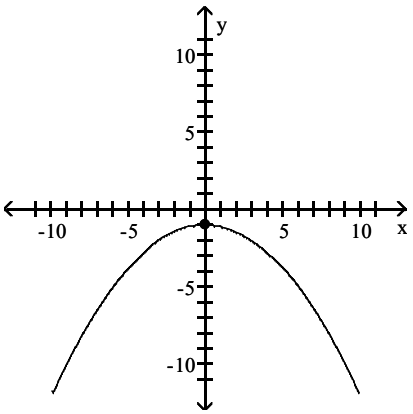


A)

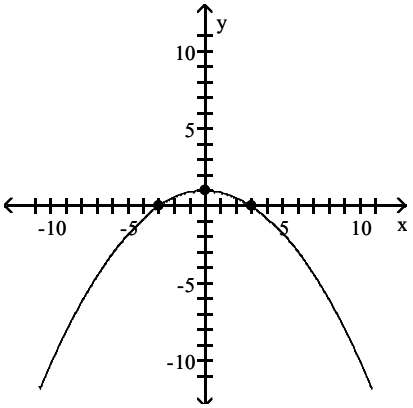


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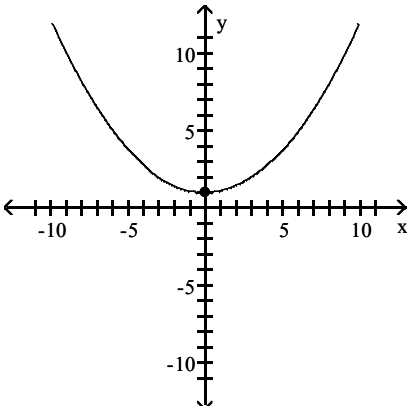
B)



C)



D)



Answer: C
Objective: (2.1) Graphing Equations by Plotting Points

Determine whether the indicated ordered pair lies on the graph of the given equation.

11) $y = 4x^2 - 1$, $(-1, 3)$

A) Yes
B) No

Answer: A
Objective: (2.1) Graphing Equations by Plotting Points

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12) $y = 6x^2 + 1$, $(-1, -5)$

A) Yes

B) No

Answer: B

Objective: (2.1) Graphing Equations by Plotting Points

13) $y = \sqrt{x} - 4$, $(9, -1)$

A) Yes

B) No

Answer: A

Objective: (2.1) Graphing Equations by Plotting Points

14) $y = \sqrt{x} - 4$, $(4, 0)$

A) Yes

B) No

Answer: B

Objective: (2.1) Graphing Equations by Plotting Points

15) $y = |x|$, $(-5, 5)$

A) Yes

B) No

Answer: A

Objective: (2.1) Graphing Equations by Plotting Points

16) $y = |x|$, $(9, -9)$

A) Yes

B) No

Answer: B

Objective: (2.1) Graphing Equations by Plotting Points

Find the midpoint of the line segment joining the points A and B.

17) A = (2, 8); B = (4, 2)

A) $(3, 5)$

B) $(5, 3)$

C) (6, 10)

D) (–2, 6)

Answer: A

Objective: (2.1) Finding the Midpoint of a Line Segment Using the Midpoint Formula

18) A = (–8, 9); B = (–5, –2)

A) (–13, 7)

B) (–3, 11)

C) $\left(-\frac{3}{2}, \frac{11}{2}\right)$

D) $\left(-\frac{13}{2}, \frac{7}{2}\right)$

Answer: D

Objective: (2.1) Finding the Midpoint of a Line Segment Using the Midpoint Formula

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19) A = (7, 1); B = (–16, –16)

A) (9, 15)

B) (–9, –15)

C) $\left(-\frac{9}{2}, -\frac{15}{2}\right)$

D) $\left(\frac{23}{2}, \frac{17}{2}\right)$

Answer: C

Objective: (2.1) Finding the Midpoint of a Line Segment Using the Midpoint Formula

20) A = (x, 2); B = (0, 4)

A) (x, 6)

B) $\left(x, 3\right)$

C) $\left(\frac{x}{2}, 3\right)$

D) $\left(-\frac{x}{2}, 2\right)$

Answer: C

Objective: (2.1) Finding the Midpoint of a Line Segment Using the Midpoint Formula

21) A = (5y, 1); B = (6y, 2)

A) (11y, 3)

B) $\left(\frac{11y}{2}, \frac{3}{2}\right)$

C) (y, 1)

D) $\left(\frac{3y}{2}, \frac{11}{2}\right)$

Answer: B

Objective: (2.1) Finding the Midpoint of a Line Segment Using the Midpoint Formula

Determine whether the points A, B, C and D form a parallelogram.

22) A(–1, 4); B(2, 7); C(4, –1); D(7, 2)

A) Yes

B) No

Answer: A

Objective: (2.1) Finding the Midpoint of a Line Segment Using the Midpoint Formula

23) A(–2, 5); B(1, 6); C(3, –2); D(6, 1)

A) Yes

B) No

Answer: B

Objective: (2.1) Finding the Midpoint of a Line Segment Using the Midpoint Formula

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Find the distance d(A, B) between the points A and B.

24) A = (4, 4); B = (4, –4)

A) 8
B) 7
C) $2\sqrt{2}$
D) 9

Answer: A
Objective: (2.1) Finding the Distance between Two Points Using the Distance Formula

25) A = (3, –5); B = (–3, 3)

A) 20
B) 10
C) 100
D) 11

Answer: B
Objective: (2.1) Finding the Distance between Two Points Using the Distance Formula

26) A = (0, 6); B = (3, 6)

A) 6
B) 9
C) $3\sqrt{5}$
D) 3

Answer: D
Objective: (2.1) Finding the Distance between Two Points Using the Distance Formula

27) A = (0, 0); B = (9, 5)

A) 106
B) $\sqrt{14}$
C) $\sqrt{106}$
D) 14

Answer: C
Objective: (2.1) Finding the Distance between Two Points Using the Distance Formula

28) A = (5, 7); B = (–5, –2)

A) 1
B) $\sqrt{19}$
C) 90
D) $\sqrt{181}$

Answer: D
Objective: (2.1) Finding the Distance between Two Points Using the Distance Formula

29) A = (7, –7); B = (3, –5)

A) 12
B) $12\sqrt{3}$
C) 6
D) $2\sqrt{5}$

Answer: D
Objective: (2.1) Finding the Distance between Two Points Using the Distance Formula

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30) A = (–4, –7); B = (4, –3)

A) 48

B) 4

C) $4\sqrt{5}$

D) $48\sqrt{3}$

Answer: C

Objective: (2.1) Finding the Distance between Two Points Using the Distance Formula

Determine whether the points A, B, and C form a right triangle.

31) A = (7, 4); B = (15, 4); C = (15, 9)

A) Yes

B) No

Answer: A

Objective: (2.1) Finding the Distance between Two Points Using the Distance Formula

32) A = (5, –3); B = (7, 1); C = (9, 0)

A) Yes

B) No

Answer: A

Objective: (2.1) Finding the Distance between Two Points Using the Distance Formula

33) A = (–3, 12); B = (3, 14); C = (2, 9)

A) Yes

B) No

Answer: B

Objective: (2.1) Finding the Distance between Two Points Using the Distance Formula

34) A = (2, 3); B = (8, 5); C = (14, –2)

A) Yes

B) No

Answer: B

Objective: (2.1) Finding the Distance between Two Points Using the Distance Formula

Write the standard form of the equation of the circle.

35) Center (0, 0), r = 3

A) $x^2 + y^2 = 9$

B) $x^2 + y^2 = 3$

C) $(x - 3)^2 + (y - 3)^2 = 3$

D) $(x - 3)^2 + (y - 3)^2 = 9$

Answer: A

Objective: (2.2) Writing the Standard Form of an Equation of a Circle

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36) Center (5, 3), r = 9

A) $(x - 5)^2 + (y - 3)^2 = 81$

B) $(x + 5)^2 + (y + 3)^2 = 9$

C) $(x - 5)^2 + (y - 3)^2 = 9$

D) $(x + 5)^2 + (y + 3)^2 = 81$

Answer: A

Objective: (2.2) Writing the Standard Form of an Equation of a Circle

37) Center (9, 0), r = 10

A) $x^2 + (y + 9)^2 = 10$

B) $(x + 9)^2 + y^2 = 100$

C) $x^2 + (y - 9)^2 = 10$

D) $(x - 9)^2 + y^2 = 100$

Answer: D

Objective: (2.2) Writing the Standard Form of an Equation of a Circle

38) Center (0, –9), r = 2

A) $(x + 9)^2 + y^2 = 4$

B) $(x - 9)^2 + y^2 = 4$

C) $x^2 + (y + 9)^2 = 4$

D) $x^2 + (y - 9)^2 = 2$

Answer: C

Objective: (2.2) Writing the Standard Form of an Equation of a Circle

39) The endpoints of a diameter are (3, 6) and (9, 6).

A) $(x - 6)^2 + (y - 6)^2 = 9$

B) $(x + 6)^2 + (y + 6)^2 = 3$

C) $(x + 6)^2 + (y + 6)^2 = 9$

D) $(x - 6)^2 + (y - 6)^2 = 3$

Answer: A

Objective: (2.2) Writing the Standard Form of an Equation of a Circle

Find the center and radius of the circle with the given equation.

40) $x^2 + y^2 = 9$

A) Center (0, 0), r = 9

B) Center (3, 3), r = 3

C) Center (3, 3), r = 9

D) Center (0, 0), r = 3

Answer: D

Objective: (2.2) Writing the Standard Form of an Equation of a Circle

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41) $(x - 8)^2 + (y + 6)^2 = 16$

A) Center (–6, 8), r = 16
B) Center (8, –6), r = 16
C) Center (–6, 8), r = 4
D) Center (8, –6), r = 4

Answer: D
Objective: (2.2) Writing the Standard Form of an Equation of a Circle

42) $(x + 8)^2 + y^2 = 4$

A) Center (0, –8), r = 4
B) Center (–8, 0), r = 4
C) Center (0, –8), r = 2
D) Center (–8, 0), r = 2

Answer: D
Objective: (2.2) Writing the Standard Form of an Equation of a Circle

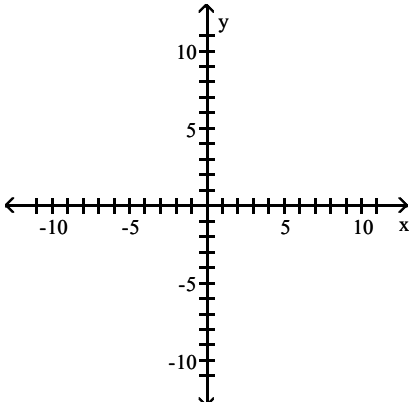
43) $x^2 + (y + 9)^2 = 4$

A) Center (0, –9), r = 2
B) Center (0, –9), r = 4
C) Center (–9, 0), r = 4
D) Center (–9, 0), r = 2

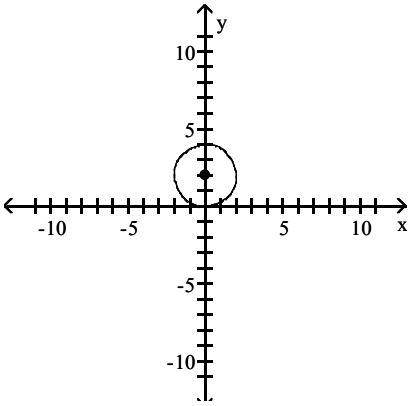
Answer: A
Objective: (2.2) Writing the Standard Form of an Equation of a Circle

Graph the equation.

44) $x^2 + y^2 = 4$

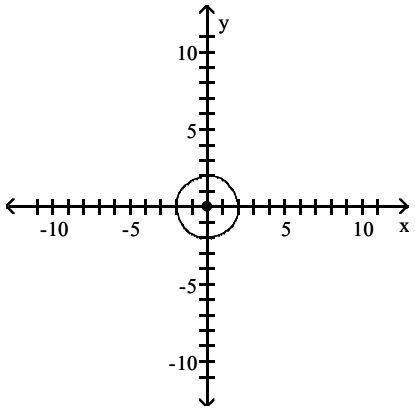


A)

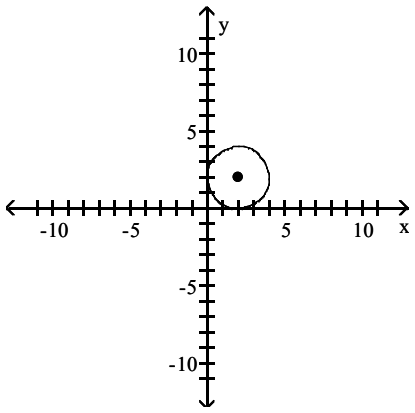


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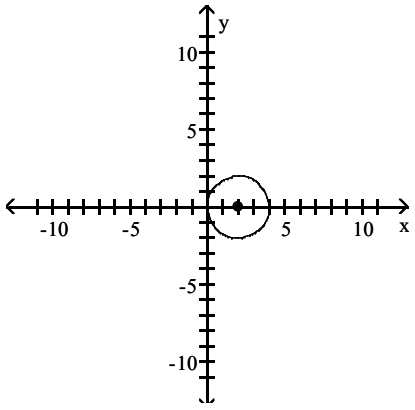
B)



C)



D)

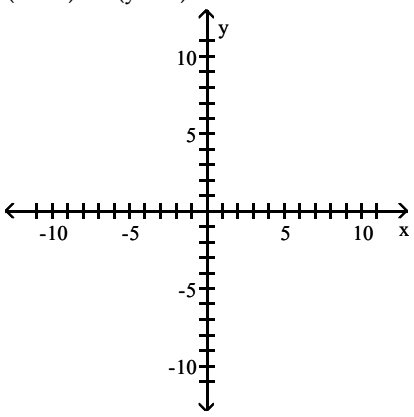


Answer: B

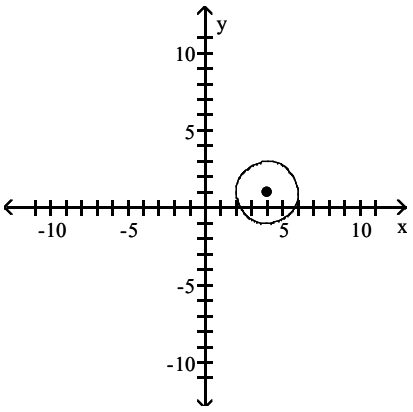
Objective: (2.2) Sketching the Graph of a Circle

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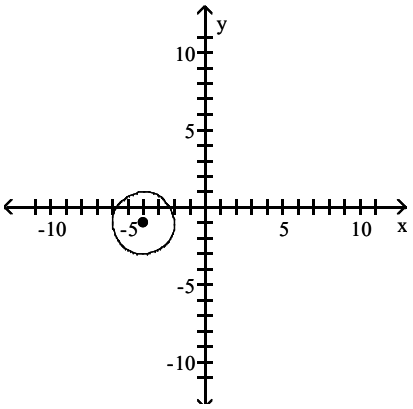
45) $(x - 4)^2 + (y + 1)^2 = 4$



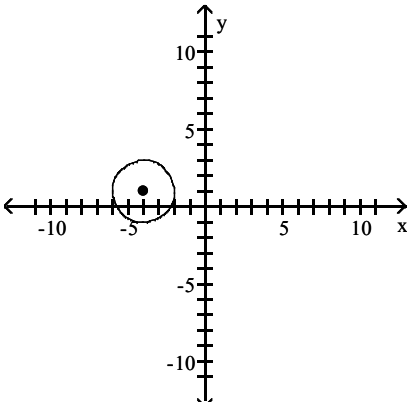
A)



B)

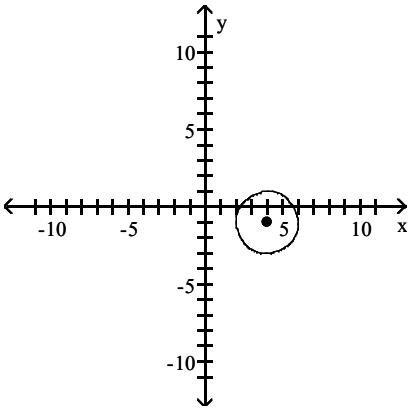


C)



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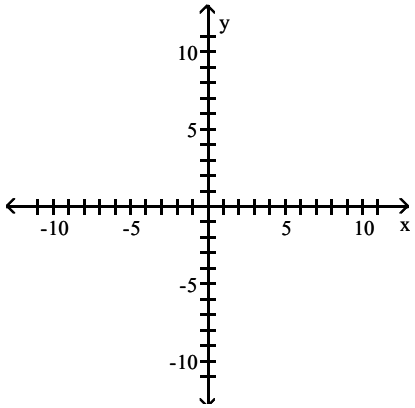
D)



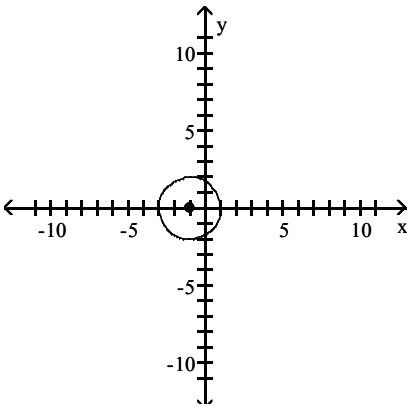
Answer: D

Objective: (2.2) Sketching the Graph of a Circle

46) $x^2 + (y - 1)^2 = 4$

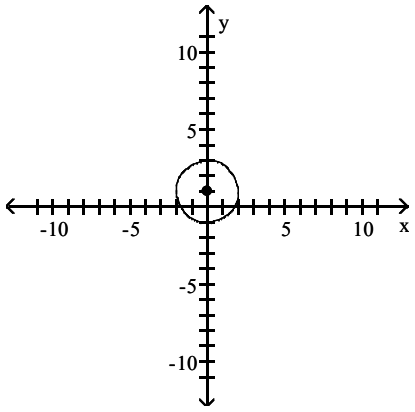


A)

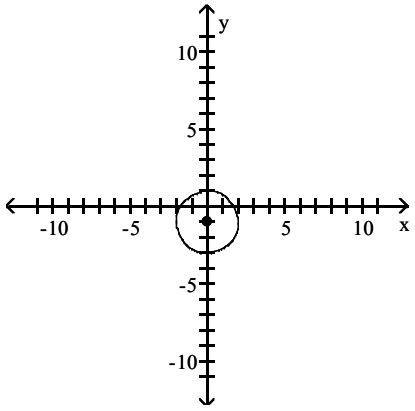


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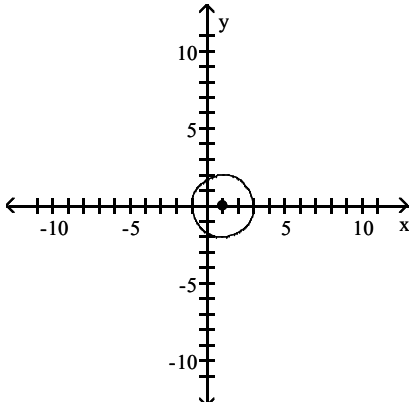
B)



C)



D)

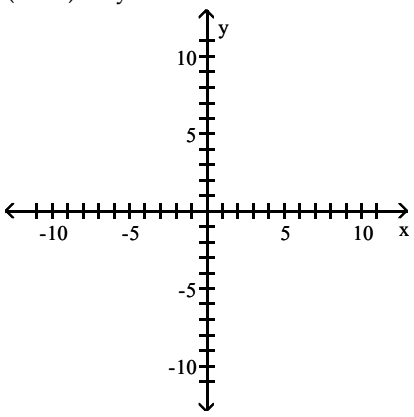


Answer: B

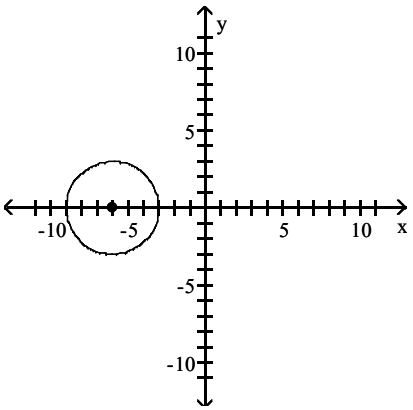
Objective: (2.2) Sketching the Graph of a Circle

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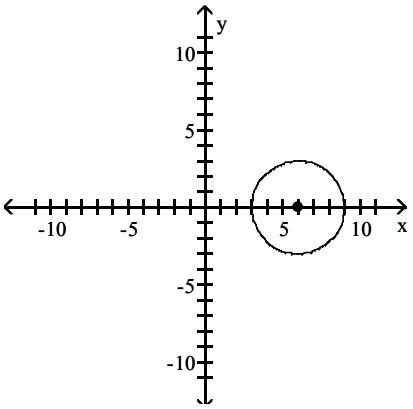
47) $(x - 6)^2 + y^2 = 9$



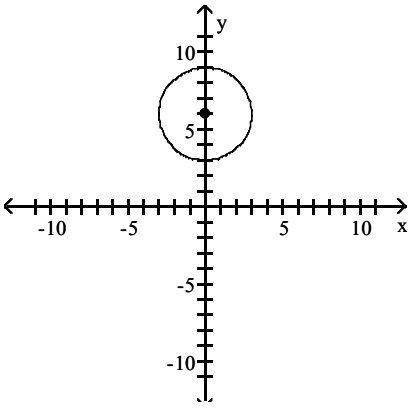
A)



B)

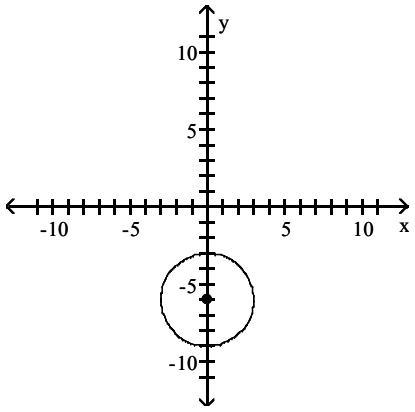


C)



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D)



Answer: B
Objective: (2.2) Sketching the Graph of a Circle

Find the intercepts of the circle. Round to the nearest hundredth, when necessary.

48) $x^2 + y^2 = 4$

A) The two x–intercepts are $x = 4$ and $x = -4$, and the two y–intercepts are $y = 4$ and $y = -4$.
B) The x–intercept is $x = 4$, and the y–intercept is $y = 4$.
C) The x–intercept is $x = 2$, and the y–intercept is $y = 2$.
D) The two x–intercepts are $x = 2$ and $x = -2$, and the two y–intercepts are $y = 2$ and $y = -2$.

Answer: D
Objective: (2.2) Sketching the Graph of a Circle

49) $(x - 5)^2 + (y - 6)^2 = 9$

A) The x–intercept is $x = 5$, and the y–intercept is $y = -9$.
B) The two x–intercepts are $x = 8$ and $x = -8$, and the two y–intercepts are $y = 3$ and $y = -3$.
C) The two x–intercepts are $x = 5$ and $x = -5$, and the two y–intercepts are $y = 3$ and $y = -3$.
D) There are no intercepts.

Answer: D
Objective: (2.2) Sketching the Graph of a Circle

50) $(x + 4)^2 + (y - 1)^2 = 32$

A) The two x–intercepts are $x \approx 1.74$ and $x \approx -9.74$, and the two y–intercepts are $y \approx 7.93$ and $y \approx -5.93$.
B) The two x–intercepts are $x \approx 9.57$ and $x \approx -1.57$, and the two y–intercepts are $y \approx 3$ and $y \approx -5$.
C) The two x–intercepts are $x \approx 1.57$ and $x \approx -9.57$, and the two y–intercepts are $y \approx 5$ and $y \approx -3$.
D) There are no intercepts.

Answer: C
Objective: (2.2) Sketching the Graph of a Circle

51) $81x^2 + 81y^2 - 36x - 108y - 417 = 0$

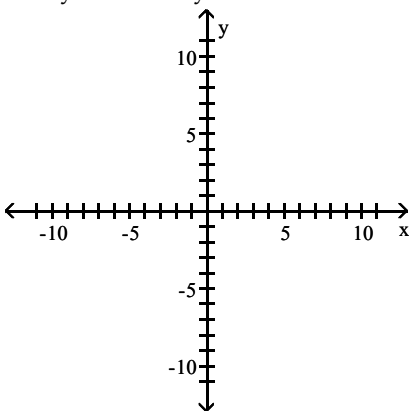
A) There are no intercepts.
B) The two x–intercepts are $x \approx 4.78$ and $x \approx -4.34$, and the two y–intercepts are $y \approx 5.4$ and $y \approx -4.06$.
C) The two x–intercepts are $x \approx 2.5$ and $x \approx -2.06$, and the two y–intercepts are $y \approx 3.03$ and $y \approx -1.7$.
D) The x–intercept is $x \approx 40.87$, and the y–intercept is $y \approx 39.71$.

Answer: C
Objective: (2.2) Sketching the Graph of a Circle

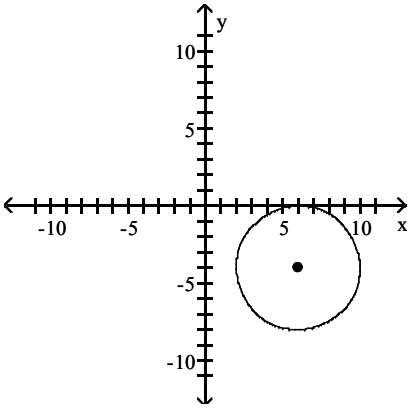
Find the center (h, k) and radius r of the circle. Graph the circle.

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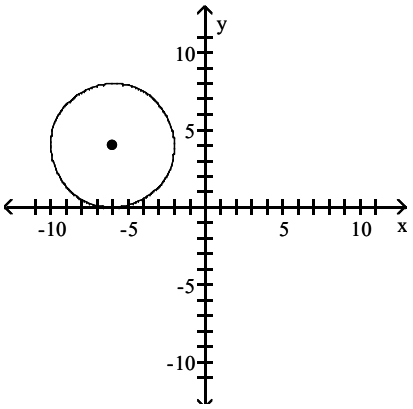
52) $x^2 + y^2 - 12x - 8y + 36 = 0$



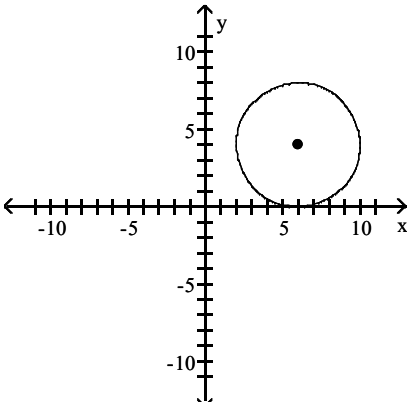
A) Center (6, –4), r = 4



B) Center (–6, 4), r = 4

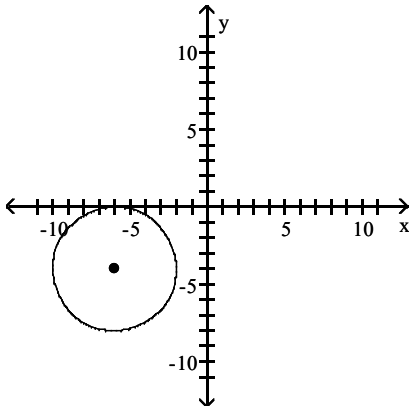


C) Center (6, 4), r = 4



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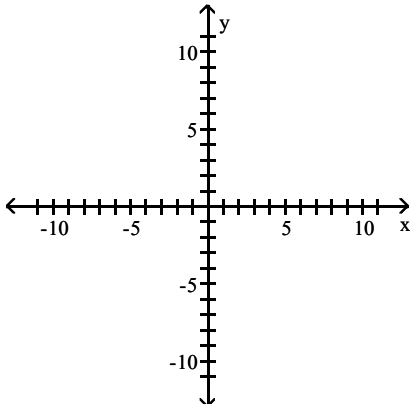
D) Center (–6, –4), r = 4



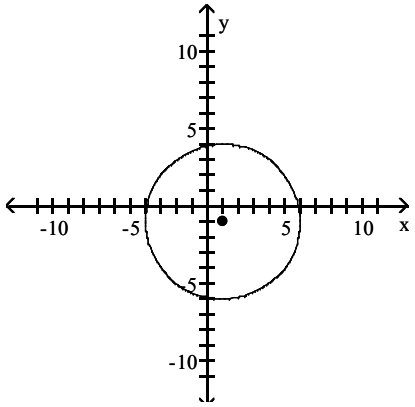
Answer: C

Objective: (2.2) Converting the General Form of a Circle into Standard Form

53) $x^2 + y^2 + 2x + 2y - 23 = 0$

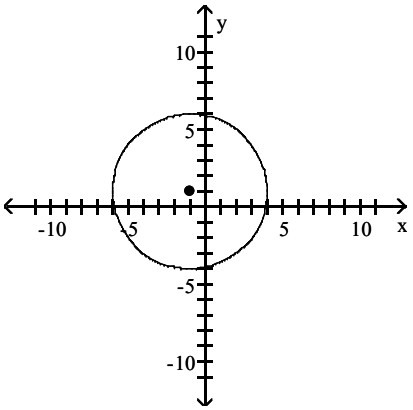


A) Center (1, –1), r = 5

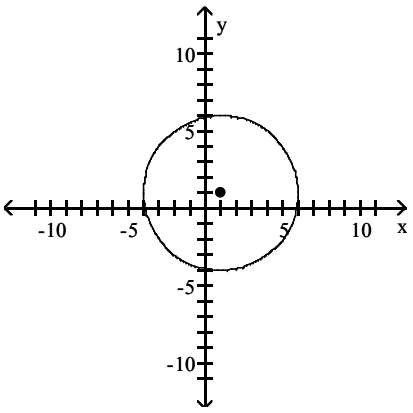


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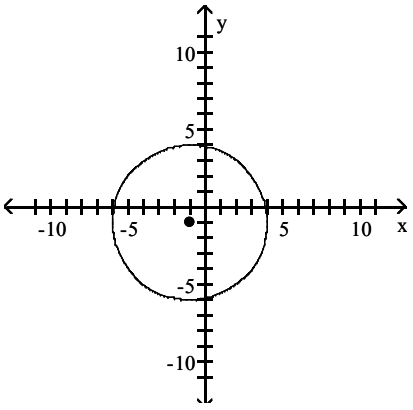
B) Center (–1, 1), r = 5



C) Center (1, 1), r = 5



D) Center (–1, –1), r = 5



Answer: D
Objective: (2.2) Converting the General Form of a Circle into Standard Form

Find the center and radius of the circle with the given equation.

54) $x^2 + 2x + 1 + (y - 9)^2 = 81$

A) Center (–9, 1), r = 81
B) Center (9, –1), r = 9
C) Center (–1, 9), r = 9
D) Center (1, –9), r = 81

Answer: C
Objective: (2.2) Converting the General Form of a Circle into Standard Form

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55) $x^2 + 8x + 16 + y^2 - 12y + 36 = 4$

A) Center $(4, -6)$, $r = 4$

B) Center $(-6, 4)$, $r = 4$

C) Center $(6, -4)$, $r = 2$

D) Center $(-4, 6)$, $r = 2$

Answer: D

Objective: (2.2) Converting the General Form of a Circle into Standard Form

56) $x^2 + y^2 + 14x - 2y + 50 = 4$

A) Center $(1, -7)$, $r = 2$

B) Center $(-7, 1)$, $r = 2$

C) Center $(-1, 7)$, $r = 4$

D) Center $(7, -1)$, $r = 4$

Answer: B

Objective: (2.2) Converting the General Form of a Circle into Standard Form

57) $x^2 + y^2 - 10x - 16y = -64$

A) Center $(5, 8)$, $r = 5$

B) Center $(-8, -5)$, $r = 25$

C) Center $(8, 5)$, $r = 5$

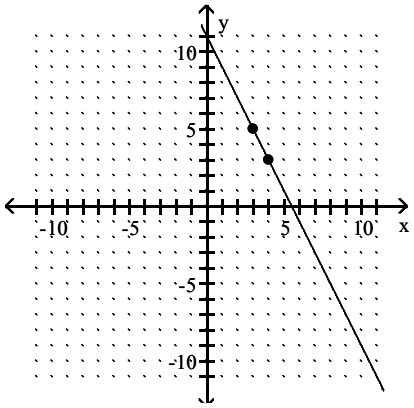
D) Center $(-5, -8)$, $r = 25$

Answer: A

Objective: (2.2) Converting the General Form of a Circle into Standard Form

Find the slope of the line.

58)



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

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

C) 2

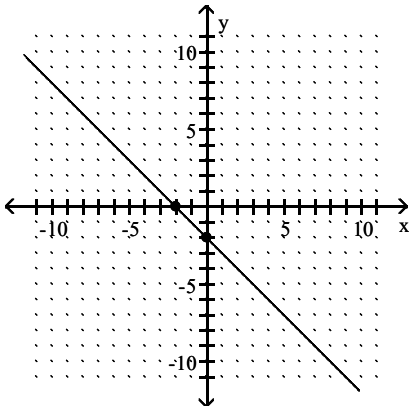
D) -2

Answer: D

Objective: (2.3) Determining the Slope of a Line

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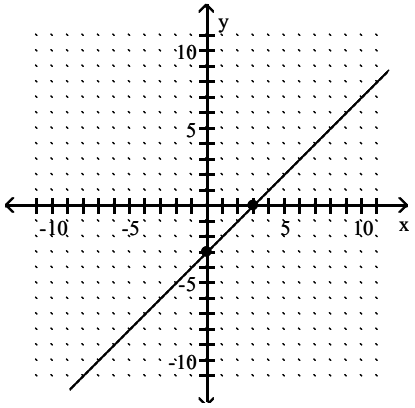
59)



A) 2
B) 1
C) –1
D) –2

Answer: C
Objective: (2.3) Determining the Slope of a Line

60)

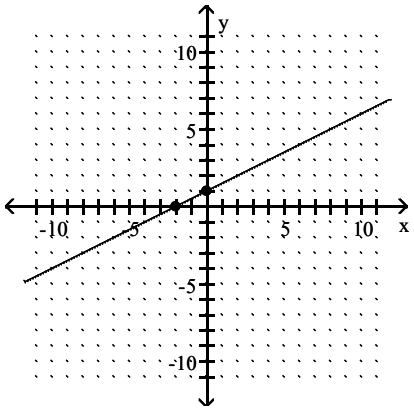


A) 3
B) –3
C) –1
D) 1

Answer: D
Objective: (2.3) Determining the Slope of a Line

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61)



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

B) –2

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

D) 2

Answer: A
Objective: (2.3) Determining the Slope of a Line

Find the slope of the line containing the two points.

62) (6, –8) and (–2, 9)

A) $-\frac{17}{8}$

B) $-\frac{8}{17}$

C) $\frac{8}{17}$

D) $\frac{17}{8}$

Answer: A
Objective: (2.3) Determining the Slope of a Line

63) (7, 0) and (0, 4)

A) $-\frac{4}{7}$

B) $\frac{7}{4}$

C) $\frac{4}{7}$

D) $-\frac{7}{4}$

Answer: A
Objective: (2.3) Determining the Slope of a Line

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64) (6, 6) and (–4, –8)

A) $\frac{5}{7}$

B) $\frac{7}{5}$

C) $-\frac{5}{7}$

D) $-\frac{7}{5}$

Answer: B
Objective: (2.3) Determining the Slope of a Line

65) (–5, –5) and (–5, –6)

A) 1
B) 0
C) –1
D) undefined

Answer: D
Objective: (2.3) Determining the Slope of a Line

66) (8, –7) and (4, –7)

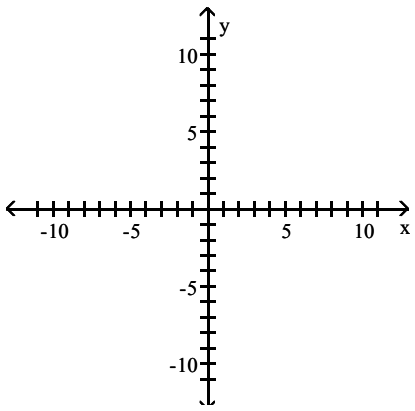
A) $\frac{1}{4}$

B) 0
C) –4
D) undefined

Answer: B
Objective: (2.3) Determining the Slope of a Line

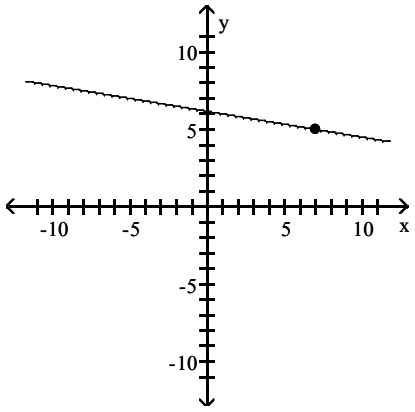
Sketch the line with the given slope that passes through the indicated point.

67) Slope $= \frac{1}{6}$; line passes through the point (7, 5)

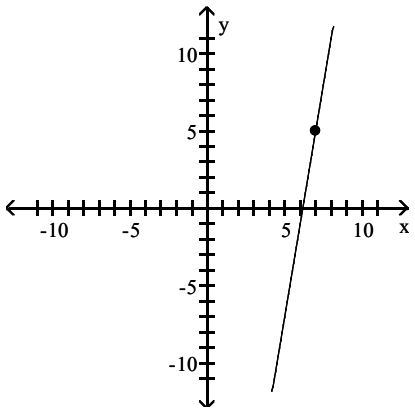


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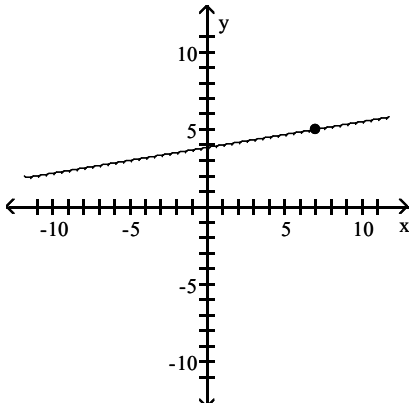
A)



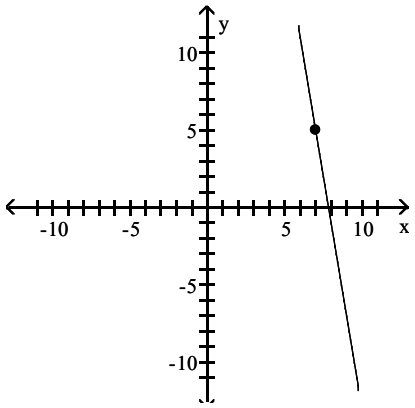
B)



C)



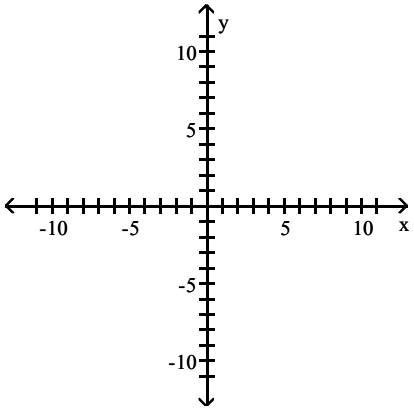
D)



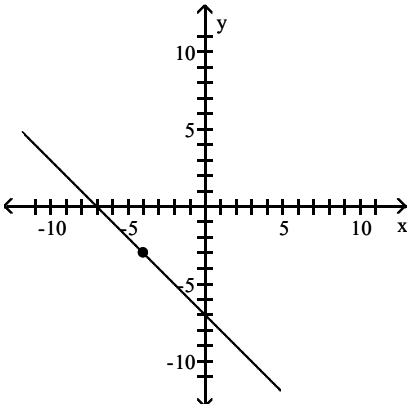
Answer: C

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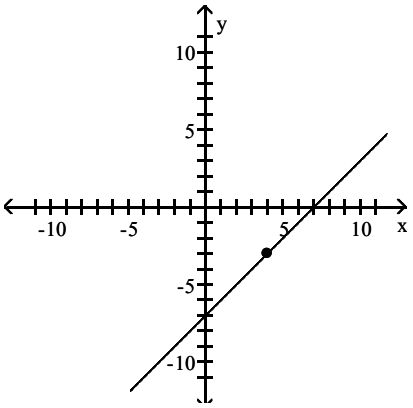
68) Slope = 1; line passes through the point (–4, –3)



A)

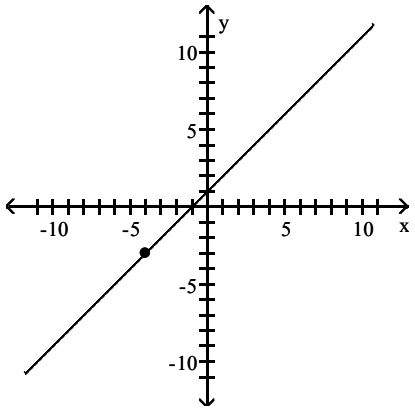


B)

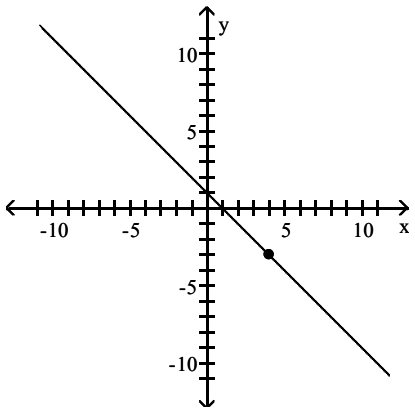


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C)



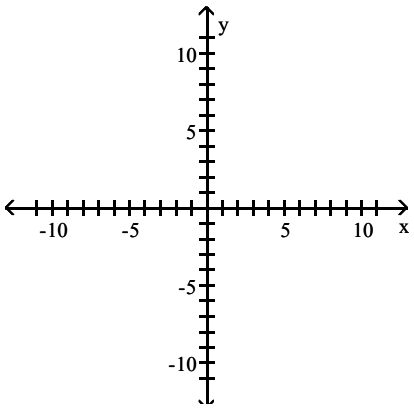
D)



Answer: C

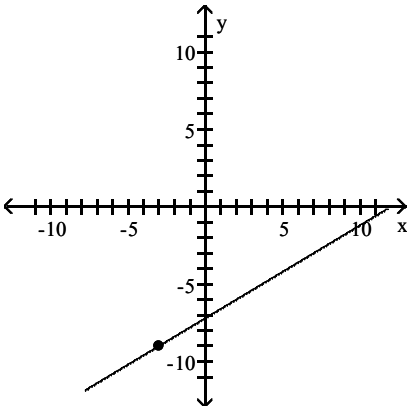
Objective: (2.3) Sketching a Line Given a Point and the Slope

69) Slope = $-\frac{3}{5}$; line passes through the point (–3, –9)

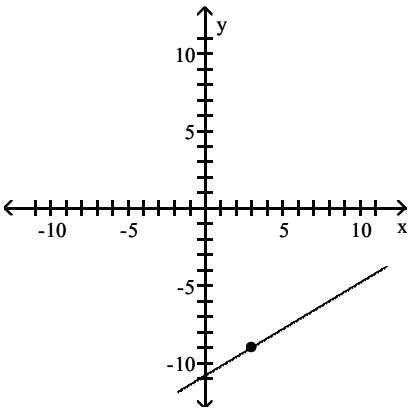


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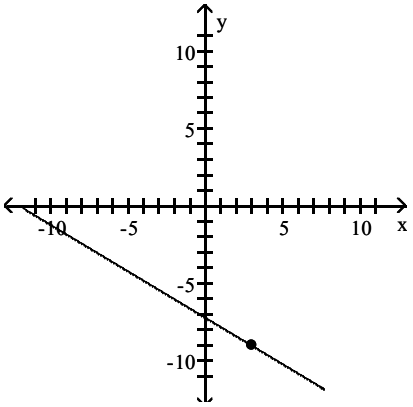
A)



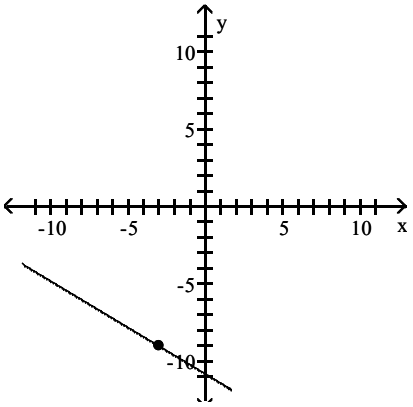
B)



C)



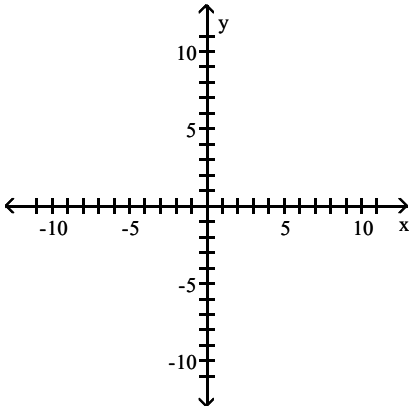
D)



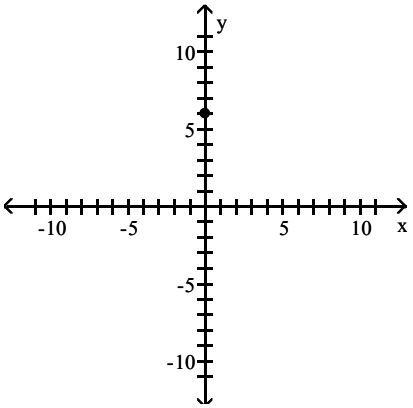
Answer: D

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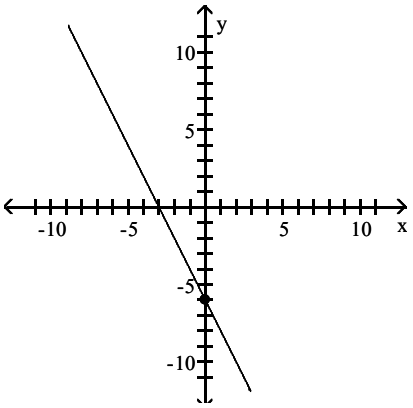
70) Slope = 2; line passes through the point (0, 6)



A)

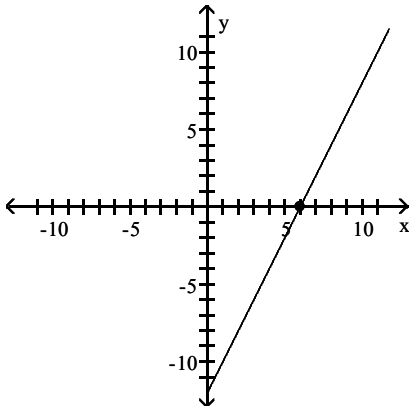


B)

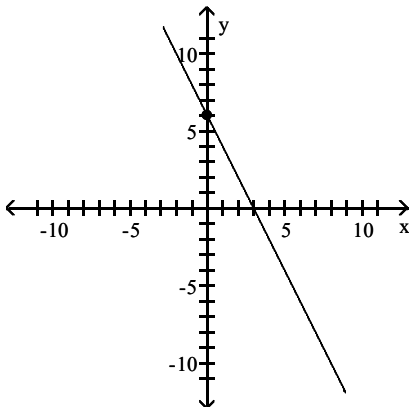


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C)



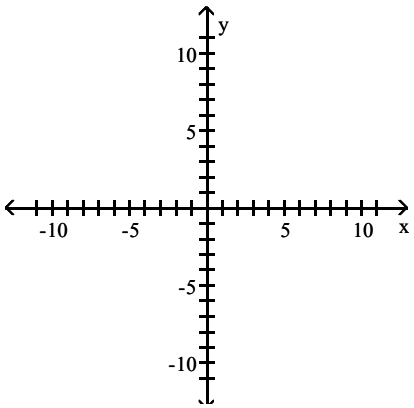
D)



Answer: A

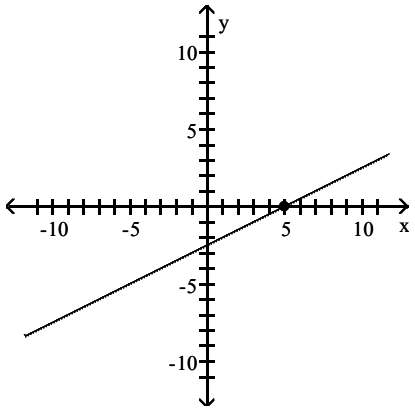
Objective: (2.3) Sketching a Line Given a Point and the Slope

71) Slope = $-\frac{1}{2}$; line passes through the point (0, 5)

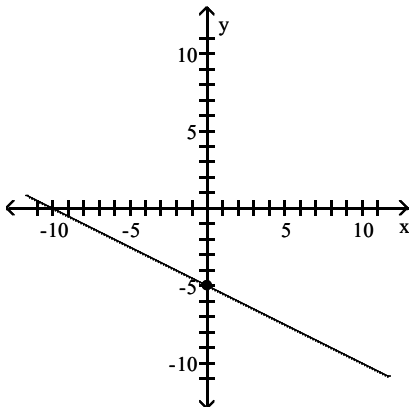


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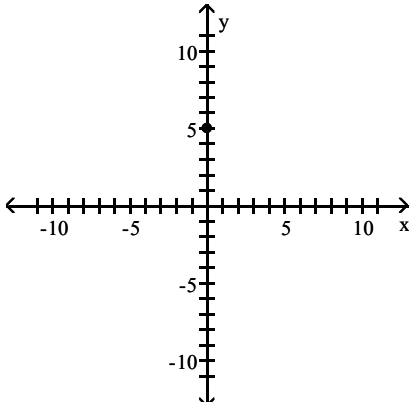
A)



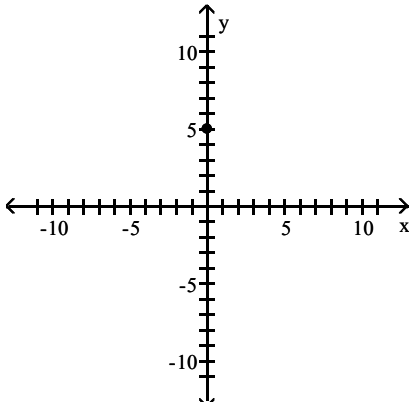
B)



C)



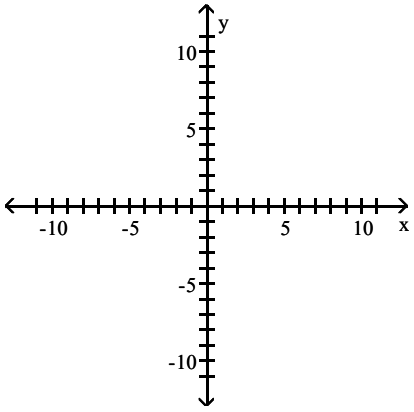
D)



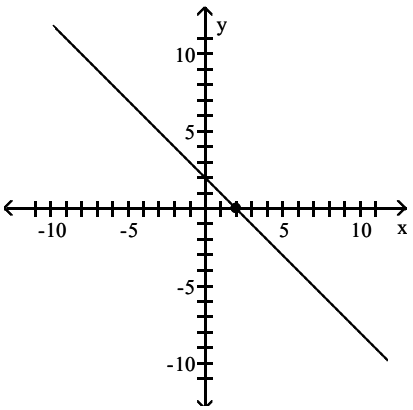
Answer: D

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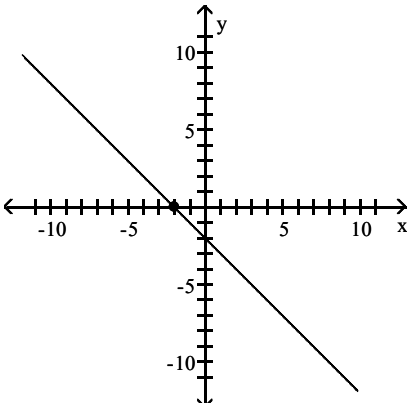
72) Slope = 1; line passes through the point (–2, 0)



A)

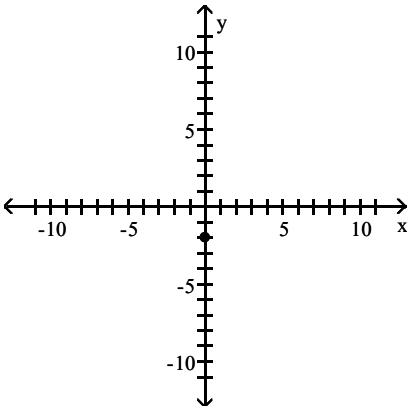


B)

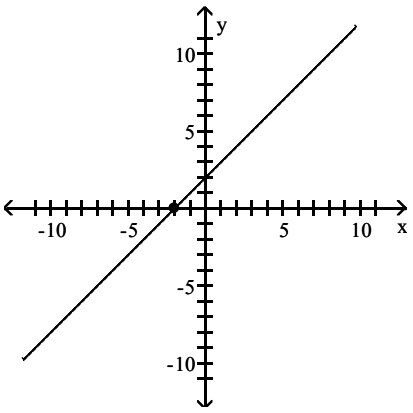


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C)



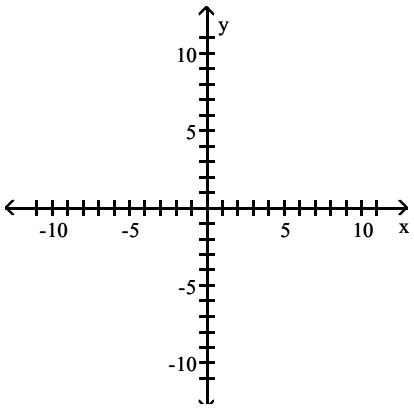
D)



Answer: D

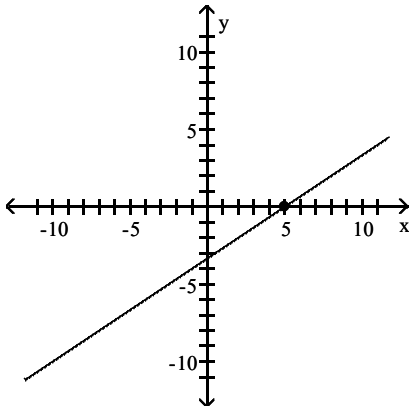
Objective: (2.3) Sketching a Line Given a Point and the Slope

73) Slope = $-\frac{2}{3}$; line passes through the point (5, 0)

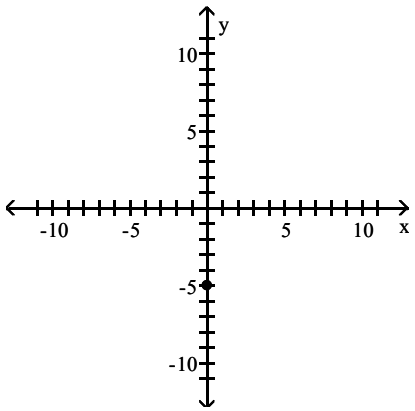


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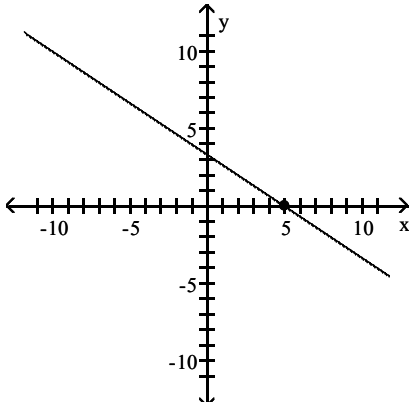
A)



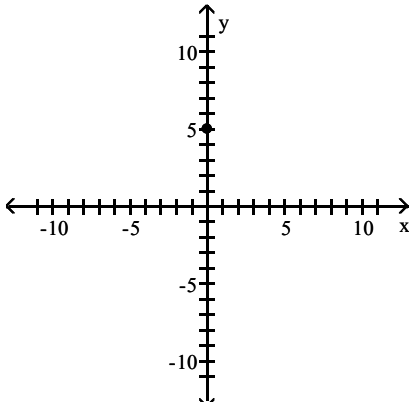
B)



C)



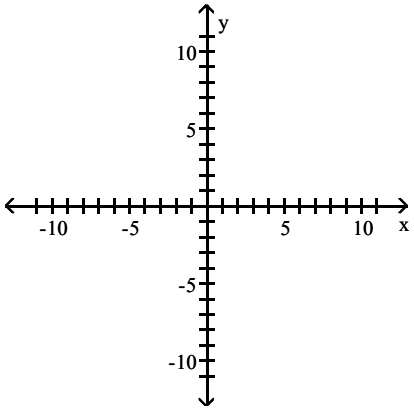
D)



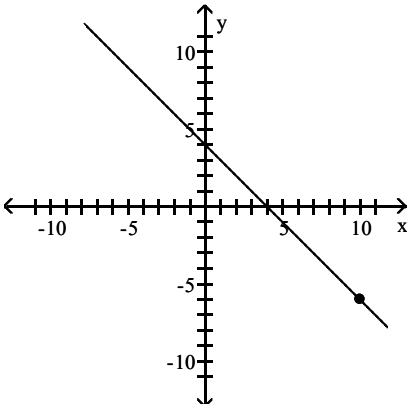
Answer: C

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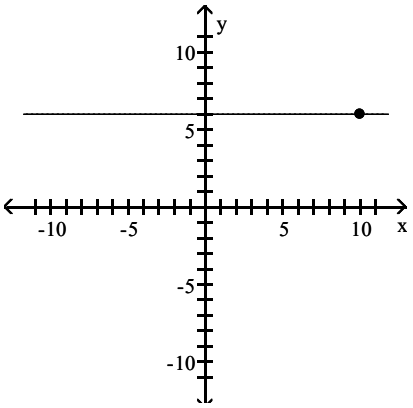
74) Slope = 0; line passes through the point (10, –6)



A)

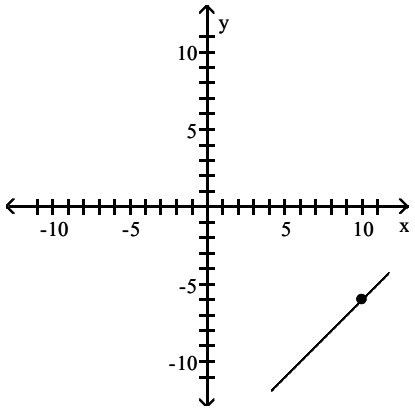


B)

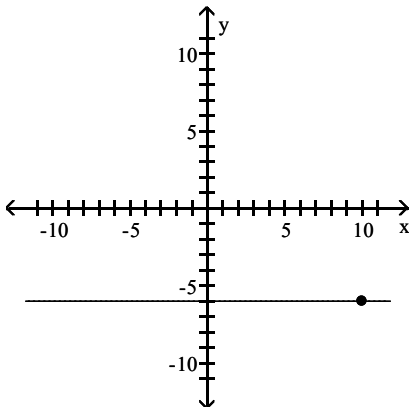


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C)



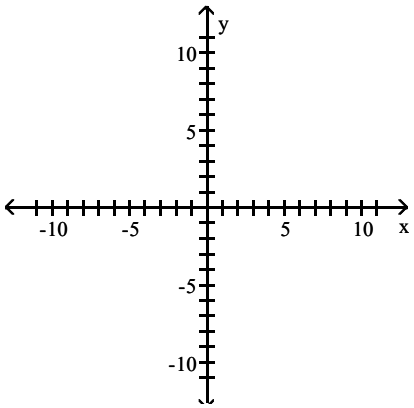
D)



Answer: D

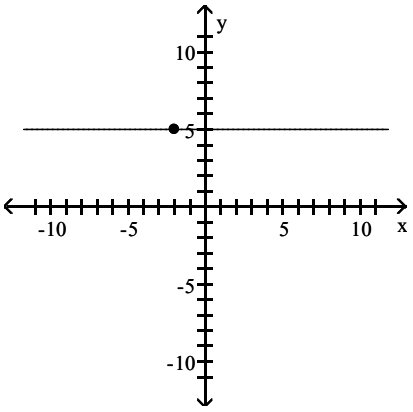
Objective: (2.3) Sketching a Line Given a Point and the Slope

75) Slope is undefined; line passes through the point (–2, 5)

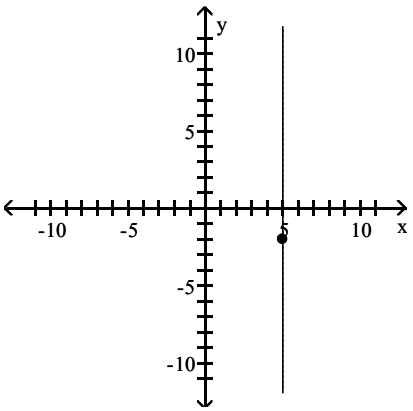


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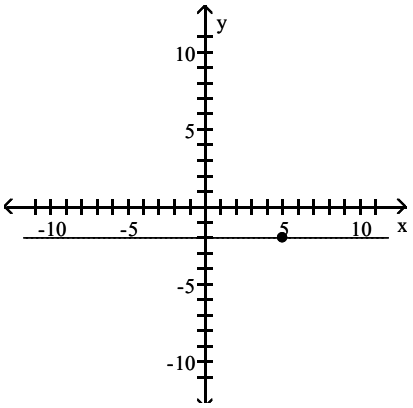
A)



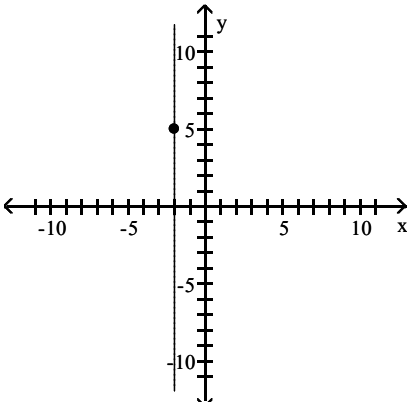
B)



C)



D)



Answer: D

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Objective: (2.3) Sketching a Line Given a Point and the Slope

Find the point–slope equation for the line with the given properties.

76) Slope $= \frac{3}{5}$; line passes through the point (–3, –5)

A) $y + 3 = \frac{3}{5}(x + 5)$

B) $y - 5 = \frac{3}{5}(x - 3)$

C) $y + 5 = \frac{3}{5}(x + 3)$

D) $x - 5 = \frac{3}{5}(y - 3)$

Answer: C
Objective: (2.3) Finding the Equation of a Line Using the Point–Slope Form

77) Slope $= -\frac{6}{7}$; line passes through the point (4, 5)

A) $y - 5 = -\frac{6}{7}(x - 4)$

B) $y - 5 = \frac{6}{7}(x - 4)$

C) $y - 5 = -\frac{6}{7}(x + 4)$

D) $y + 5 = -\frac{6}{7}(x + 4)$

Answer: A
Objective: (2.3) Finding the Equation of a Line Using the Point–Slope Form

Find the equation of the line passing through the indicated two points. Write the equation in point–slope form.

78) (–4, –7) and (2, 11)

A) $y - 7 = 3(x - 4)$ or $y - 11 = 3(x - 2)$
B) $y + 7 = 3(x + 4)$ or $y - 11 = 3(x - 2)$
C) $y + 7 = 3(x - 4)$ or $y - 11 = 3(x + 2)$
D) $y - 7 = 3(x - 4)$ or $y + 11 = 3(x + 2)$

Answer: B
Objective: (2.3) Finding the Equation of a Line Using the Point–Slope Form

79) (–2, 11) and (4, –13)

A) $y + 11 = -4(x + 2)$ or $y + 13 = -4(x + 4)$
B) $y + 11 = -4(x - 2)$ or $y - 13 = -4(x + 4)$
C) $y - 11 = -4(x + 2)$ or $y + 13 = -4(x - 4)$
D) $y - 11 = -4(x - 2)$ or $y - 13 = -4(x - 4)$

Answer: C
Objective: (2.3) Finding the Equation of a Line Using the Point–Slope Form

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80) (–2, 1) and (3, 7)

A) $y + 1 = \frac{6}{5}(x - 2)$ or $y + 7 = \frac{6}{5}(x + 3)$

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

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

D) $y - 1 = \frac{6}{5}(x + 2)$ or $y - 7 = \frac{6}{5}(x - 3)$

Answer: D
Objective: (2.3) Finding the Equation of a Line Using the Point–Slope Form

81) (–7, 1) and (–1, –6)

A) $y - 1 = -\frac{7}{6}(x + 7)$ or $y + 6 = -\frac{7}{6}(x + 1)$

B) $y - 1 = \frac{8}{5}(x + 7)$ or $y + 6 = \frac{8}{5}(x + 1)$

C) $y + 1 = -\frac{7}{6}(x - 7)$ or $y - 6 = -\frac{7}{6}(x - 1)$

D) $y + 1 = \frac{8}{5}(x - 7)$ or $y - 6 = \frac{8}{5}(x - 1)$

Answer: A
Objective: (2.3) Finding the Equation of a Line Using the Point–Slope Form

82) (–2, 3) and (–9, 9)

A) $y + 3 = -\frac{5}{18}(x - 2)$ or $y + 9 = -\frac{5}{18}(x - 9)$

B) $y - 3 = -\frac{6}{7}(x + 2)$ or $y - 9 = -\frac{6}{7}(x + 9)$

C) $y - 3 = -\frac{5}{18}(x + 2)$ or $y - 9 = -\frac{5}{18}(x + 9)$

D) $y + 3 = -\frac{6}{7}(x - 2)$ or $y + 9 = -\frac{6}{7}(x - 9)$

Answer: B
Objective: (2.3) Finding the Equation of a Line Using the Point–Slope Form

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83) $\left(1, \frac{15}{56}\right)$ and $\left(8, \frac{8}{7}\right)$

A) $y + \frac{15}{56} = \frac{1}{8}(x + 1)$ or $y + \frac{8}{7} = \frac{1}{8}(x + 8)$

B) $y + \frac{15}{56} = 8(x + 1)$ or $y + \frac{8}{7} = 8(x + 8)$

C) $y - \frac{15}{56} = \frac{1}{8}(x - 1)$ or $y - \frac{8}{7} = \frac{1}{8}(x - 8)$

D) $y - \frac{15}{56} = 8(x - 1)$ or $y - \frac{8}{7} = 8(x - 8)$

Answer: C
Objective: (2.3) Finding the Equation of a Line Using the Point–Slope Form

Find the slope–intercept form of the equation of the line with the given properties.

84) Slope = –7; y–intercept = 12

A) $y = 12x + 7$
B) $y = 12x - 7$
C) $y = -7x + 12$
D) $y = -7x - 12$

Answer: C
Objective: (2.3) Finding the Equation of a Line Using the Slope–Intercept Form

85) Slope = $-\frac{3}{4}$; y–intercept = 3

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

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

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

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

Answer: D
Objective: (2.3) Finding the Equation of a Line Using the Slope–Intercept Form

Find the equation of the line passing through the indicated two points. Write the equation in slope–intercept form.

86) (3, –4) and (8, 6)

A) $y = 5x - 19$
B) $y = 10x - 34$
C) $x = 3$
D) $y = 2x - 10$

Answer: D
Objective: (2.3) Finding the Equation of a Line Using the Slope–Intercept Form

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87) (3, –5) and (0, –7)

A) $y = -\frac{2}{3}x - 7$

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

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

D) $y = \frac{2}{3}x - 7$

Answer: D
Objective: (2.3) Finding the Equation of a Line Using the Slope–Intercept Form

88) (–2, 0) and (2, 9)

A) $y = -\frac{9}{4}x + \frac{9}{2}$

B) $y = \frac{9}{4}x + \frac{9}{2}$

C) $y = \frac{2}{7}x + \frac{59}{7}$

D) $y = -\frac{2}{7}x + \frac{59}{7}$

Answer: B
Objective: (2.3) Finding the Equation of a Line Using the Slope–Intercept Form

89) (–6, 7) and (2, 0)

A) $y = -\frac{13}{2}x + 13$

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

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

D) $y = \frac{13}{2}x + 13$

Answer: C
Objective: (2.3) Finding the Equation of a Line Using the Slope–Intercept Form

90) (–9, –6) and (–1, 8)

A) $x = -9$

B) $y = \frac{7}{3}x + 15$

C) $y = \frac{7}{4}x + \frac{39}{4}$

D) $y = 2x + 12$

Answer: C
Objective: (2.3) Finding the Equation of a Line Using the Slope–Intercept Form

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91) $\left(1, \frac{7}{12}\right)$ and $\left(3, \frac{5}{4}\right)$

A) $y = \frac{1}{3}x + \frac{29}{36}$

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

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

D) $y = 3x - \frac{29}{12}$

Answer: C
Objective: (2.3) Finding the Equation of a Line Using the Slope–Intercept Form

92) $\left(-\frac{1}{5}, \frac{3}{5}\right)$ and $\left(\frac{1}{5}, \frac{7}{5}\right)$

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

B) $y = 2x + 1$

C) $y = 4x + 10$

D) $y = 2x$

Answer: B
Objective: (2.3) Finding the Equation of a Line Using the Slope–Intercept Form

93) (9, 9) and (–6, 9)

A) $y = 3x - 30$

B) $y = 4x - 39$

C) $y = 12x - 111$

D) $y = 9$

Answer: D
Objective: (2.3) Finding the Equation of a Line Using the Slope–Intercept Form

94) (–1, –5) and (–1, –3)

A) $x = -5$

B) $y = -5$

C) $x = -1$

D) $y = -1$

Answer: C
Objective: (2.3) Finding the Equation of a Line Using the Slope–Intercept Form

Find the equation of the line passing through the indicated two points in standard form.

95) (8, –9) and (0, 2)

A) $-11x + 8y = 16$

B) $17x - 2y = -4$

C) $11x + 8y = 16$

D) $-17x + 2y = -4$

Answer: C
Objective: (2.3) Writing the Equation of a Line in Standard Form

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96) (8, 0) and (0, –9)

A) $9x + 8y = 72$

B) $y = -\frac{9}{8}x + 8$

C) $9x - 8y = 72$

D) $y = -\frac{9}{8}x - 9$

Answer: C
Objective: (2.3) Writing the Equation of a Line in Standard Form

97) (3, –2) and (–5, 5)

A) $5x - 10y = -25$
B) $7x + 8y = 5$
C) $-5x + 10y = -25$
D) $-7x + 8y = 5$

Answer: B
Objective: (2.3) Writing the Equation of a Line in Standard Form

98) (–3, 0) and (0, 2)

A) $-2x - 3y = -6$
B) $3x + 2y = -4$
C) $2x - 3y = -6$
D) $-3x - 2y = -4$

Answer: C
Objective: (2.3) Writing the Equation of a Line in Standard Form

99) (–5, 0) and (3, –3)

A) $3x - 8y = 15$
B) $-5x + 6y = -3$
C) $-3x - 8y = 15$
D) $5x - 6y = -3$

Answer: C
Objective: (2.3) Writing the Equation of a Line in Standard Form

100) (7, –1) and (–5, 6)

A) $7x + 12y = 37$
B) $-8x + 11y = -26$
C) $-7x + 12y = 37$
D) $8x - 11y = -26$

Answer: A
Objective: (2.3) Writing the Equation of a Line in Standard Form

Find the slope and y–intercept of the line.

101) $x + y = 4$

A) slope = –1; y–intercept = 4
B) slope = 1; y–intercept = 4
C) slope = –1; y–intercept = –4
D) slope = 0; y–intercept = 4

Answer: A
Objective: (2.3) Finding the Slope and the y–Intercept of a Line in Standard Form

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102) $12x + y = 5$

A) slope $= -12$; y–intercept $= 5$

B) slope $= 12$; y–intercept $= 5$

C) slope $= -\frac{1}{12}$; y–intercept $= \frac{5}{12}$

D) slope $= \frac{12}{5}$; y–intercept $= \frac{1}{5}$

Answer: A

Objective: (2.3) Finding the Slope and the y–Intercept of a Line in Standard Form

103) $-5x + 7y = 2$

A) slope $= 5$; y–intercept $= 13$

B) slope $= \frac{7}{5}$; y–intercept $= -\frac{2}{5}$

C) slope $= \frac{13}{7}$; y–intercept $= \frac{2}{7}$

D) slope $= \frac{5}{7}$; y–intercept $= \frac{2}{7}$

Answer: D

Objective: (2.3) Finding the Slope and the y–Intercept of a Line in Standard Form

104) $13x + 5y = 3$

A) slope $= \frac{13}{5}$; y–intercept $= \frac{3}{5}$

B) slope $= -\frac{13}{5}$; y–intercept $= \frac{3}{5}$

C) slope $= \frac{13}{5}$; y–intercept $= -\frac{3}{5}$

D) slope $= 13$; y–intercept $= 3$

Answer: B

Objective: (2.3) Finding the Slope and the y–Intercept of a Line in Standard Form

105) $2x - 7y = 3$

A) slope $= \frac{7}{2}$; y–intercept $= \frac{3}{2}$

B) slope $= 2$; y–intercept $= 3$

C) slope $= \frac{2}{7}$; y–intercept $= \frac{3}{7}$

D) slope $= \frac{2}{7}$; y–intercept $= -\frac{3}{7}$

Answer: D

Objective: (2.3) Finding the Slope and the y–Intercept of a Line in Standard Form

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106) $5x - 3y = 15$

A) slope $= 5$; y–intercept $= 15$

B) slope $= -\frac{5}{3}$; y–intercept $= 5$

C) slope $= \frac{5}{3}$; y–intercept $= -5$

D) slope $= \frac{3}{5}$; y–intercept $= 3$

Answer: C

Objective: (2.3) Finding the Slope and the y–Intercept of a Line in Standard Form

107) $x + 9y = 1$

A) slope $= 1$; y–intercept $= 1$

B) slope $= -\frac{1}{9}$; y–intercept $= \frac{1}{9}$

C) slope $= -9$; y–intercept $= 9$

D) slope $= \frac{1}{9}$; y–intercept $= \frac{1}{9}$

Answer: B

Objective: (2.3) Finding the Slope and the y–Intercept of a Line in Standard Form

108) $-x + 12y = 24$

A) slope $= \frac{1}{12}$; y–intercept $= 2$

B) slope $= -1$; y–intercept $= 24$

C) slope $= -\frac{1}{12}$; y–intercept $= 2$

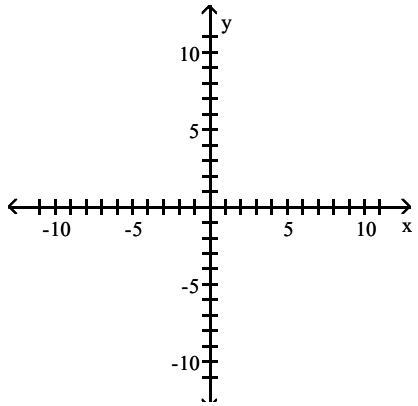
D) slope $= 12$; y–intercept $= -24$

Answer: A

Objective: (2.3) Finding the Slope and the y–Intercept of a Line in Standard Form

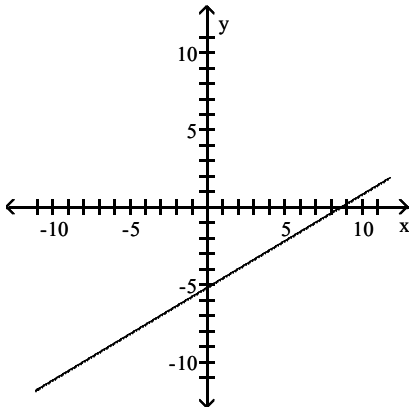
Find the slope of the line determined by the given equation and then sketch the line.

109) $3x + 5y = 26$

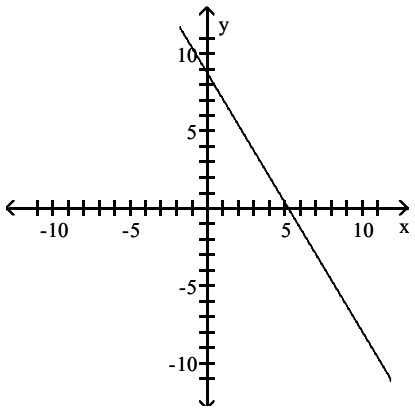


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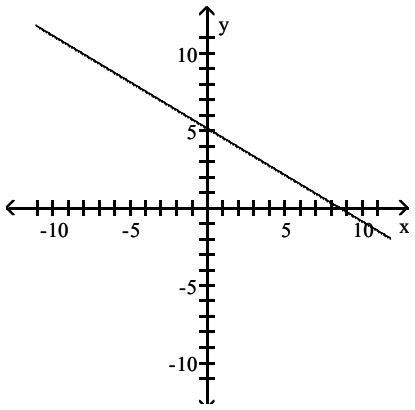
A) slope $= \frac{3}{5}$



B) slope $= -\frac{5}{3}$

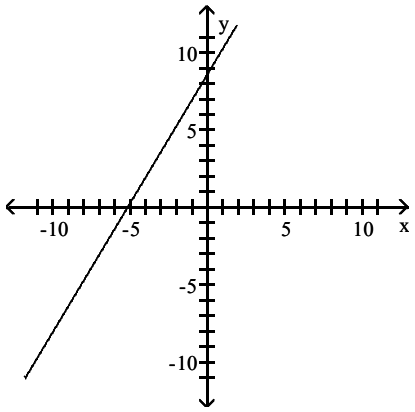


C) slope $= -\frac{3}{5}$



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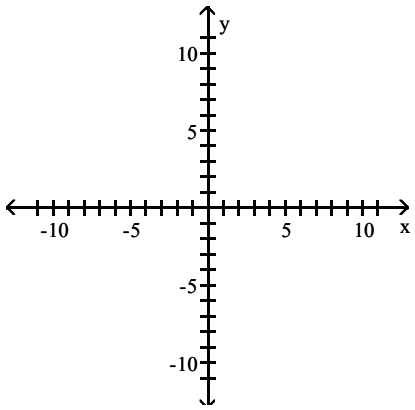
D) slope $= \frac{5}{3}$



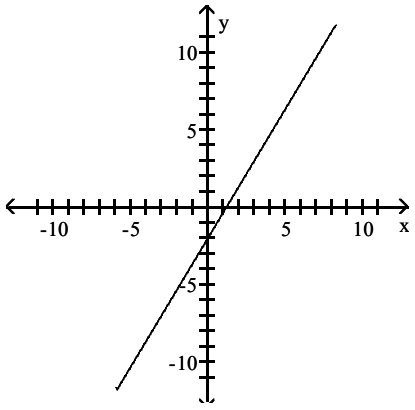
Answer: C

Objective: (2.3) Finding the Slope and the y–Intercept of a Line in Standard Form

110) $3x - 5y = -6$

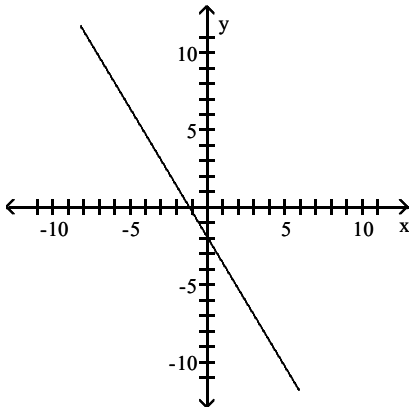


A) slope $= \frac{5}{3}$

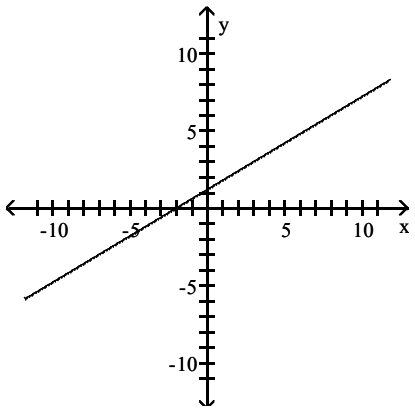


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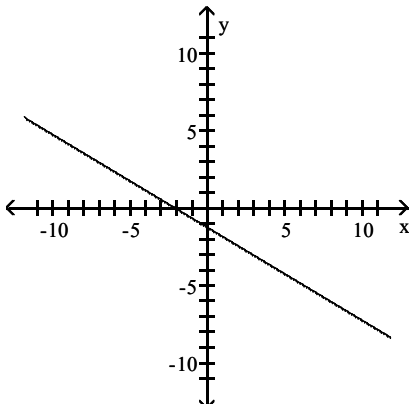
B) slope $= -\frac{5}{3}$



C) slope $= \frac{3}{5}$



D) slope $= -\frac{3}{5}$

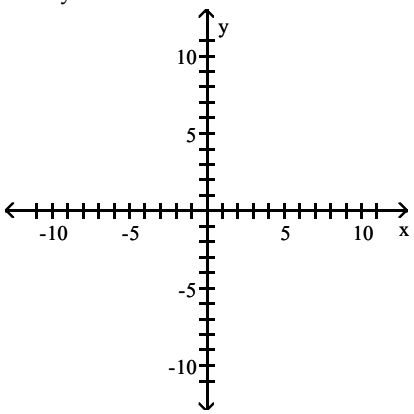


Answer: C
Objective: (2.3) Finding the Slope and the y–Intercept of a Line in Standard Form

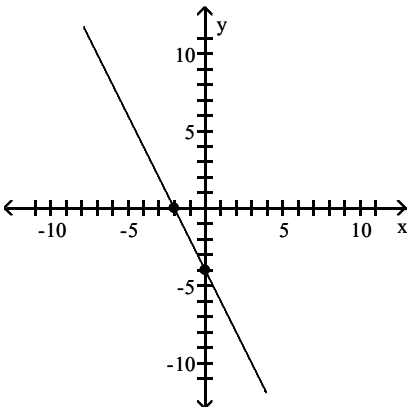
Graph the equation by plotting intercepts.

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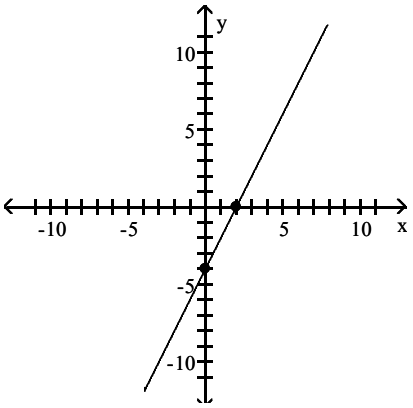
111) $2x - y = -4$



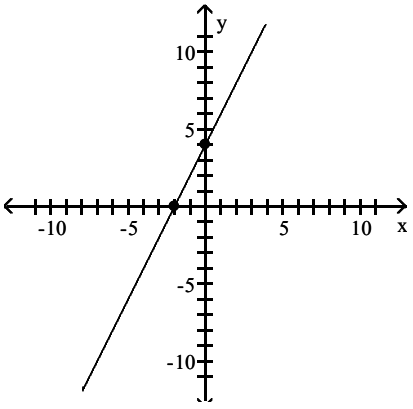
A)



B)

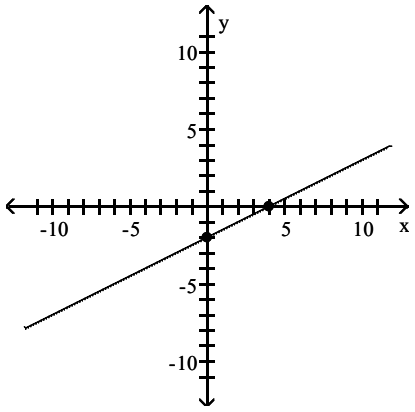


C)



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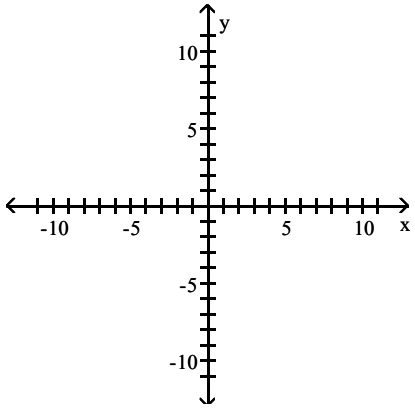
D)



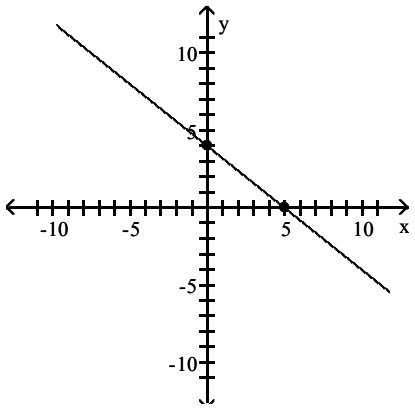
Answer: C

Objective: (2.3) Sketching Lines by Plotting Intercepts

112) $4x + 5y = 20$

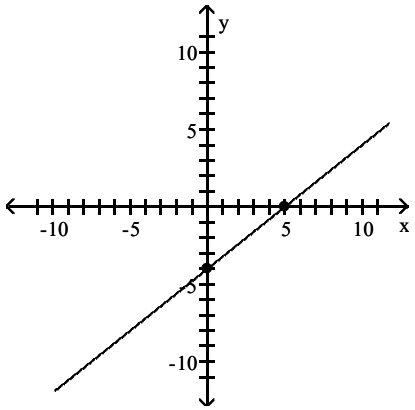


A)

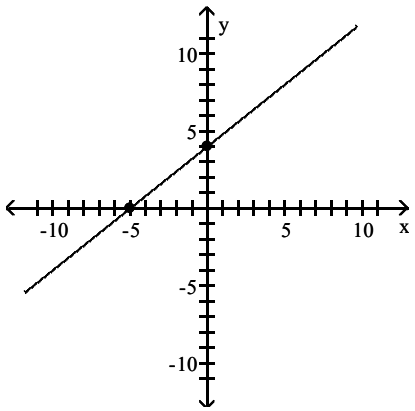


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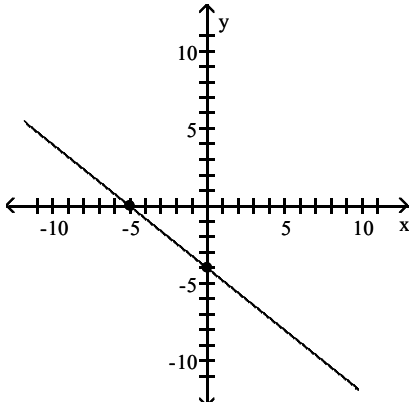
B)



C)



D)



Answer: A
Objective: (2.3) Sketching Lines by Plotting Intercepts

Find the slope–intercept form of the equation of the line with the given properties.

113) Find the equation of the horizontal line passing through the point (–8, 3).

A) $y = 3$
B) $x = 3$
C) $x = -8$
D) $y = -8$

Answer: A
Objective: (2.3) Finding the Equation of a Horizontal Line and a Vertical Line

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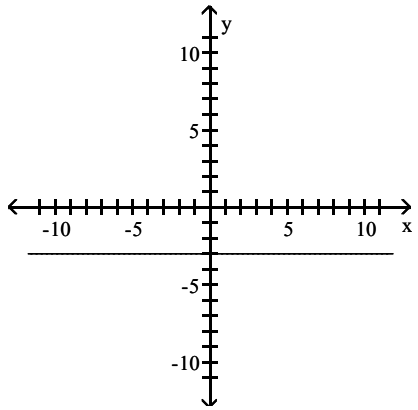
114) Find the equation of the vertical line passing through the point (10, –6).

A) y = –6
B) y = 10
C) x = –6
D) x = 10

Answer: D
Objective: (2.3) Finding the Equation of a Horizontal Line and a Vertical Line

Find the equation of the given line.

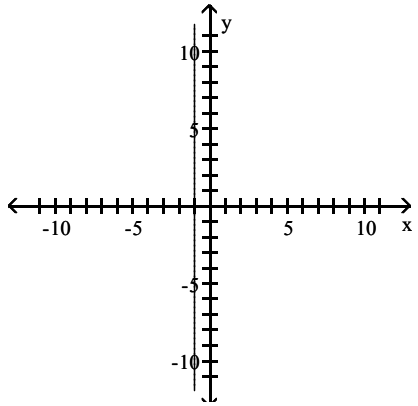
115)



A) x = –3
B) y = 3
C) x = 3
D) y = –3

Answer: D
Objective: (2.3) Finding the Equation of a Horizontal Line and a Vertical Line

116)



A) y = –1
B) x = –1
C) y = 1
D) x = 1

Answer: B
Objective: (2.3) Finding the Equation of a Horizontal Line and a Vertical Line

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Choose the appropriate response.

117) Parallel lines _____.

A) have slopes that are negative reciprocals of each other
B) have the same slope
C) have opposite slopes
D) always intersect at (0, 0)

Answer: B
Objective: (2.4) Understanding the Definition of Parallel Lines

118) Perpendicular lines _____.

A) have opposite slopes
B) have the same slope
C) always intersect at a 45° angle
D) have slopes that are negative reciprocals of each other

Answer: D
Objective: (2.4) Understanding the Definition of Perpendicular Lines

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

119) $3x - 8y = 20$
$32x + 12y = -7$

A) parallel
B) perpendicular
C) neither

Answer: B
Objective: (2.4) Determining Whether Two Lines Are Parallel, Perpendicular, or Neither

120) $3x - 2y = -16$
$2x + 3y = -20$

A) parallel
B) perpendicular
C) neither

Answer: B
Objective: (2.4) Determining Whether Two Lines Are Parallel, Perpendicular, or Neither

121) $9x + 3y = 12$
$24x + 8y = 33$

A) parallel
B) perpendicular
C) neither

Answer: A
Objective: (2.4) Determining Whether Two Lines Are Parallel, Perpendicular, or Neither

122) $3x - 9y = 16$
$27x + 12y = 16$

A) parallel
B) perpendicular
C) neither

Answer: C
Objective: (2.4) Determining Whether Two Lines Are Parallel, Perpendicular, or Neither

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123) $x = 6$
$y = -9$
A) parallel
B) perpendicular
C) neither

Answer: B
Objective: (2.4) Determining Whether Two Lines Are Parallel, Perpendicular, or Neither

Find the equation of the line described, and express your answer in the specified form.

124) Parallel to the line $y = -2x$; passes through the point $(4, 7)$; slope–intercept form
A) $y - 7 = -2x - 4$
B) $y = -2x - 15$
C) $y = -2x + 15$
D) $y = -2x$

Answer: C
Objective: (2.4) Finding the Equations of Parallel and Perpendicular Lines

125) Parallel to the line $x + 4y = 5$; passes through the point $(0, 0)$; slope–intercept form
A) $y = 1$
B) $y = -\frac{1}{4}x + 5$
C) $y = -\frac{1}{4}x$
D) $y = \frac{1}{4}x$

Answer: C
Objective: (2.4) Finding the Equations of Parallel and Perpendicular Lines

126) Parallel to the line $-3x - y = 7$; passes through the point $(0, 0)$; slope–intercept form
A) $y = -\frac{1}{3}x$
B) $y = -3x$
C) $y = \frac{1}{3}x + 7$
D) $y = \frac{1}{3}x$

Answer: B
Objective: (2.4) Finding the Equations of Parallel and Perpendicular Lines

127) Parallel to the line $y = 2$; passes through the point $(6, 9)$; standard form
A) $y = 6$
B) $y = 9$
C) $y = 2$
D) $y = -9$

Answer: B
Objective: (2.4) Finding the Equations of Parallel and Perpendicular Lines

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128) Parallel to the line $x = 4$; passes through the point (5, 6); standard form

A) $y = 6$
B) $x = 5$
C) $y = 4$
D) $x = 6$

Answer: B
Objective: (2.4) Finding the Equations of Parallel and Perpendicular Lines

129) Parallel to the line $8x + 9y = 5$; passes through the point (4, –10); standard form

A) $8x + 9y = -58$
B) $4x + 9y = 5$
C) $9x + 8y = -10$
D) $8x - 9y = -58$

Answer: A
Objective: (2.4) Finding the Equations of Parallel and Perpendicular Lines

130) Parallel to the line $-5x + 2y = -3$; passes through the point (4, 0); standard form

A) $-5x + 2y = -20$
B) $2x + 5y = 20$
C) $-5x + 2y = 8$
D) $2x + 5y = 8$

Answer: A
Objective: (2.4) Finding the Equations of Parallel and Perpendicular Lines

131) Perpendicular to the line $y = 3x - 3$; passes through the point (–1, 2); slope–intercept form

A) $y = -3x + \frac{5}{3}$

B) $y = -\frac{1}{3}x + \frac{5}{3}$

C) $y = 3x + \frac{5}{3}$

D) $y = \frac{1}{3}x + \frac{5}{3}$

Answer: B
Objective: (2.4) Finding the Equations of Parallel and Perpendicular Lines

132) Perpendicular to the line $y = \frac{1}{9}x + 7$; passes through the point (3, –5); slope–intercept form

A) $y = -9x - 22$
B) $y = -9x + 22$
C) $y = -\frac{1}{9}x - \frac{22}{9}$

D) $y = 9x - 22$

Answer: B
Objective: (2.4) Finding the Equations of Parallel and Perpendicular Lines

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133) Perpendicular to the line $-3x - y = 8$; passes through the point $(0, -\frac{8}{3})$; standard form

A) $y = -\frac{1}{3}x - \frac{8}{3}$

B) $y = \frac{1}{3}x + 8$

C) $y = \frac{1}{3}x - \frac{8}{3}$

D) $y = -\frac{7}{3}$

Answer: C
Objective: (2.4) Finding the Equations of Parallel and Perpendicular Lines

134) Perpendicular to the line $x - 4y = 5$; passes through the point $(5, 3)$; slope–intercept form

A) $y = 4x - 23$

B) $y = -4x + 23$

C) $y = -\frac{1}{4}x - \frac{23}{4}$

D) $y = -4x - 23$

Answer: B
Objective: (2.4) Finding the Equations of Parallel and Perpendicular Lines

135) Perpendicular to the line $y = -7$; passes through the point $(5, 6)$; standard form

A) $y = 5$

B) $y = 6$

C) $x = 5$

D) $x = 6$

Answer: C
Objective: (2.4) Finding the Equations of Parallel and Perpendicular Lines

136) Perpendicular to the line $x = 7$; passes through the point $(2, 8)$; standard form

A) $y = 8$

B) $y = 2$

C) $x = 2$

D) $x = 8$

Answer: A
Objective: (2.4) Finding the Equations of Parallel and Perpendicular Lines

137) Perpendicular to the line $2x + 5y = 9$; passes through the point $(-3, -3)$; standard form

A) $2x - 5 = 2$

B) $-5x + 2y = 9$

C) $-5x - 2y = 9$

D) $-3x - 5y = 9$

Answer: B
Objective: (2.4) Finding the Equations of Parallel and Perpendicular Lines

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138) Perpendicular to the line $-2x + 9y = -56$; passes through the point $(-8, -5)$; standard form

A) $9x - 2y = -56$
B) $-2x - 9y = -82$
C) $9x + 2y = -82$
D) $9x - 2y = -82$

Answer: C
Objective: (2.4) Finding the Equations of Parallel and Perpendicular Lines

139) Perpendicular to the line $3x + 4y = -4$; passes through the point $(0, -1)$; standard form

A) $3x + 4y = -3$
B) $4x - 3y = 3$
C) $3x + 4y = -4$
D) $4x - 3y = -4$

Answer: B
Objective: (2.4) Finding the Equations of Parallel and Perpendicular Lines

Use slope to determine whether the quadrilateral with the given vertices forms a parallelogram. If it is a parallelogram, determine whether it is also a rhombus.

140) A(–2, 3), B(1, 6), C(3, –2), D(6, 1)

A) No, it is not a parallelogram (nor is it a rhombus).
B) Yes, it is a parallelogram but it is not also a rhombus.
C) Yes, it is a parallelogram and it is also a rhombus.

Answer: B
Objective: (2.4) Solving a Geometric Application of Parallel and Perpendicular Lines

141) A(3, 8), B(6, 7), C(8, –1), D(11, 2)

A) Yes, it is a parallelogram and it is also a rhombus.
B) Yes, it is a parallelogram but it is not also a rhombus.
C) No, it is not a parallelogram (nor is it a rhombus).

Answer: C
Objective: (2.4) Solving a Geometric Application of Parallel and Perpendicular Lines

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1) A
ID: AT3T 2.1.1–1
Diff: 0
Objective: (2.1) Plotting Ordered Pairs

2) A
ID: AT3T 2.1.1–2
Diff: 0
Objective: (2.1) Plotting Ordered Pairs

3) D
ID: AT3T 2.1.1–3
Diff: 0
Objective: (2.1) Plotting Ordered Pairs

4) C
ID: AT3T 2.1.1–4
Diff: 0
Objective: (2.1) Plotting Ordered Pairs

5) A
ID: AT3T 2.1.1–5
Diff: 0
Objective: (2.1) Plotting Ordered Pairs

6) A
ID: AT3T 2.1.1–6
Diff: 0
Objective: (2.1) Plotting Ordered Pairs

7) C
ID: AT3T 2.1.2–1
Diff: 0
Objective: (2.1) Graphing Equations by Plotting Points

8) A
ID: AT3T 2.1.2–2
Diff: 0
Objective: (2.1) Graphing Equations by Plotting Points

9) A
ID: AT3T 2.1.2–3
Diff: 0
Objective: (2.1) Graphing Equations by Plotting Points

10) C
ID: AT3T 2.1.2–4
Diff: 0
Objective: (2.1) Graphing Equations by Plotting Points

11) A
ID: AT3T 2.1.2–5
Diff: 0
Objective: (2.1) Graphing Equations by Plotting Points

12) B
ID: AT3T 2.1.2–6
Diff: 0
Objective: (2.1) Graphing Equations by Plotting Points

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13) A
ID: AT3T 2.1.2–7
Diff: 0
Objective: (2.1) Graphing Equations by Plotting Points

14) B
ID: AT3T 2.1.2–8
Diff: 0
Objective: (2.1) Graphing Equations by Plotting Points

15) A
ID: AT3T 2.1.2–9
Diff: 0
Objective: (2.1) Graphing Equations by Plotting Points

16) B
ID: AT3T 2.1.2–10
Diff: 0
Objective: (2.1) Graphing Equations by Plotting Points

17) A
ID: AT3T 2.1.3–1
Diff: 0
Objective: (2.1) Finding the Midpoint of a Line Segment Using the Midpoint Formula

18) D
ID: AT3T 2.1.3–2
Diff: 0
Objective: (2.1) Finding the Midpoint of a Line Segment Using the Midpoint Formula

19) C
ID: AT3T 2.1.3–3
Diff: 0
Objective: (2.1) Finding the Midpoint of a Line Segment Using the Midpoint Formula

20) C
ID: AT3T 2.1.3–4
Diff: 0
Objective: (2.1) Finding the Midpoint of a Line Segment Using the Midpoint Formula

21) B
ID: AT3T 2.1.3–5
Diff: 0
Objective: (2.1) Finding the Midpoint of a Line Segment Using the Midpoint Formula

22) A
ID: AT3T 2.1.3–6
Diff: 0
Objective: (2.1) Finding the Midpoint of a Line Segment Using the Midpoint Formula

23) B
ID: AT3T 2.1.3–7
Diff: 0
Objective: (2.1) Finding the Midpoint of a Line Segment Using the Midpoint Formula

24) A
ID: AT3T 2.1.4–1
Diff: 0
Objective: (2.1) Finding the Distance between Two Points Using the Distance Formula

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25) B
ID: AT3T 2.1.4–2
Diff: 0
Objective: (2.1) Finding the Distance between Two Points Using the Distance Formula

26) D
ID: AT3T 2.1.4–3
Diff: 0
Objective: (2.1) Finding the Distance between Two Points Using the Distance Formula

27) C
ID: AT3T 2.1.4–4
Diff: 0
Objective: (2.1) Finding the Distance between Two Points Using the Distance Formula

28) D
ID: AT3T 2.1.4–5
Diff: 0
Objective: (2.1) Finding the Distance between Two Points Using the Distance Formula

29) D
ID: AT3T 2.1.4–6
Diff: 0
Objective: (2.1) Finding the Distance between Two Points Using the Distance Formula

30) C
ID: AT3T 2.1.4–7
Diff: 0
Objective: (2.1) Finding the Distance between Two Points Using the Distance Formula

31) A
ID: AT3T 2.1.4–8
Diff: 0
Objective: (2.1) Finding the Distance between Two Points Using the Distance Formula

32) A
ID: AT3T 2.1.4–9
Diff: 0
Objective: (2.1) Finding the Distance between Two Points Using the Distance Formula

33) B
ID: AT3T 2.1.4–10
Diff: 0
Objective: (2.1) Finding the Distance between Two Points Using the Distance Formula

34) B
ID: AT3T 2.1.4–11
Diff: 0
Objective: (2.1) Finding the Distance between Two Points Using the Distance Formula

35) A
ID: AT3T 2.2.1–1
Diff: 0
Objective: (2.2) Writing the Standard Form of an Equation of a Circle

36) A
ID: AT3T 2.2.1–2
Diff: 0
Objective: (2.2) Writing the Standard Form of an Equation of a Circle

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37) D
ID: AT3T 2.2.1–3
Diff: 0
Objective: (2.2) Writing the Standard Form of an Equation of a Circle

38) C
ID: AT3T 2.2.1–4
Diff: 0
Objective: (2.2) Writing the Standard Form of an Equation of a Circle

39) A
ID: AT3T 2.2.1–5
Diff: 0
Objective: (2.2) Writing the Standard Form of an Equation of a Circle

40) D
ID: AT3T 2.2.1–6
Diff: 0
Objective: (2.2) Writing the Standard Form of an Equation of a Circle

41) D
ID: AT3T 2.2.1–7
Diff: 0
Objective: (2.2) Writing the Standard Form of an Equation of a Circle

42) D
ID: AT3T 2.2.1–8
Diff: 0
Objective: (2.2) Writing the Standard Form of an Equation of a Circle

43) A
ID: AT3T 2.2.1–9
Diff: 0
Objective: (2.2) Writing the Standard Form of an Equation of a Circle

44) B
ID: AT3T 2.2.2–1
Diff: 0
Objective: (2.2) Sketching the Graph of a Circle

45) D
ID: AT3T 2.2.2–2
Diff: 0
Objective: (2.2) Sketching the Graph of a Circle

46) B
ID: AT3T 2.2.2–3
Diff: 0
Objective: (2.2) Sketching the Graph of a Circle

47) B
ID: AT3T 2.2.2–4
Diff: 0
Objective: (2.2) Sketching the Graph of a Circle

48) D
ID: AT3T 2.2.2–5
Diff: 0
Objective: (2.2) Sketching the Graph of a Circle

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49) D
ID: AT3T 2.2.2–6
Diff: 0
Objective: (2.2) Sketching the Graph of a Circle

50) C
ID: AT3T 2.2.2–7
Diff: 0
Objective: (2.2) Sketching the Graph of a Circle

51) C
ID: AT3T 2.2.2–8
Diff: 0
Objective: (2.2) Sketching the Graph of a Circle

52) C
ID: AT3T 2.2.3–1
Diff: 0
Objective: (2.2) Converting the General Form of a Circle into Standard Form

53) D
ID: AT3T 2.2.3–2
Diff: 0
Objective: (2.2) Converting the General Form of a Circle into Standard Form

54) C
ID: AT3T 2.2.3–3
Diff: 0
Objective: (2.2) Converting the General Form of a Circle into Standard Form

55) D
ID: AT3T 2.2.3–4
Diff: 0
Objective: (2.2) Converting the General Form of a Circle into Standard Form

56) B
ID: AT3T 2.2.3–5
Diff: 0
Objective: (2.2) Converting the General Form of a Circle into Standard Form

57) A
ID: AT3T 2.2.3–6
Diff: 0
Objective: (2.2) Converting the General Form of a Circle into Standard Form

58) D
ID: AT3T 2.3.1–1
Diff: 0
Objective: (2.3) Determining the Slope of a Line

59) C
ID: AT3T 2.3.1–2
Diff: 0
Objective: (2.3) Determining the Slope of a Line

60) D
ID: AT3T 2.3.1–3
Diff: 0
Objective: (2.3) Determining the Slope of a Line

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61) A
ID: AT3T 2.3.1–4
Diff: 0
Objective: (2.3) Determining the Slope of a Line

62) A
ID: AT3T 2.3.1–5
Diff: 0
Objective: (2.3) Determining the Slope of a Line

63) A
ID: AT3T 2.3.1–6
Diff: 0
Objective: (2.3) Determining the Slope of a Line

64) B
ID: AT3T 2.3.1–7
Diff: 0
Objective: (2.3) Determining the Slope of a Line

65) D
ID: AT3T 2.3.1–8
Diff: 0
Objective: (2.3) Determining the Slope of a Line

66) B
ID: AT3T 2.3.1–9
Diff: 0
Objective: (2.3) Determining the Slope of a Line

67) C
ID: AT3T 2.3.2–1
Diff: 0
Objective: (2.3) Sketching a Line Given a Point and the Slope

68) C
ID: AT3T 2.3.2–2
Diff: 0
Objective: (2.3) Sketching a Line Given a Point and the Slope

69) D
ID: AT3T 2.3.2–3
Diff: 0
Objective: (2.3) Sketching a Line Given a Point and the Slope

70) A
ID: AT3T 2.3.2–4
Diff: 0
Objective: (2.3) Sketching a Line Given a Point and the Slope

71) D
ID: AT3T 2.3.2–5
Diff: 0
Objective: (2.3) Sketching a Line Given a Point and the Slope

72) D
ID: AT3T 2.3.2–6
Diff: 0
Objective: (2.3) Sketching a Line Given a Point and the Slope

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73) C
ID: AT3T 2.3.2–7
Diff: 0
Objective: (2.3) Sketching a Line Given a Point and the Slope

74) D
ID: AT3T 2.3.2–8
Diff: 0
Objective: (2.3) Sketching a Line Given a Point and the Slope

75) D
ID: AT3T 2.3.2–9
Diff: 0
Objective: (2.3) Sketching a Line Given a Point and the Slope

76) C
ID: AT3T 2.3.3–1
Diff: 0
Objective: (2.3) Finding the Equation of a Line Using the Point–Slope Form

77) A
ID: AT3T 2.3.3–2
Diff: 0
Objective: (2.3) Finding the Equation of a Line Using the Point–Slope Form

78) B
ID: AT3T 2.3.3–3
Diff: 0
Objective: (2.3) Finding the Equation of a Line Using the Point–Slope Form

79) C
ID: AT3T 2.3.3–4
Diff: 0
Objective: (2.3) Finding the Equation of a Line Using the Point–Slope Form

80) D
ID: AT3T 2.3.3–5
Diff: 0
Objective: (2.3) Finding the Equation of a Line Using the Point–Slope Form

81) A
ID: AT3T 2.3.3–6
Diff: 0
Objective: (2.3) Finding the Equation of a Line Using the Point–Slope Form

82) B
ID: AT3T 2.3.3–7
Diff: 0
Objective: (2.3) Finding the Equation of a Line Using the Point–Slope Form

83) C
ID: AT3T 2.3.3–8
Diff: 0
Objective: (2.3) Finding the Equation of a Line Using the Point–Slope Form

84) C
ID: AT3T 2.3.4–1
Diff: 0
Objective: (2.3) Finding the Equation of a Line Using the Slope–Intercept Form

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85) D
ID: AT3T 2.3.4–2
Diff: 0
Objective: (2.3) Finding the Equation of a Line Using the Slope–Intercept Form

86) D
ID: AT3T 2.3.4–3
Diff: 0
Objective: (2.3) Finding the Equation of a Line Using the Slope–Intercept Form

87) D
ID: AT3T 2.3.4–4
Diff: 0
Objective: (2.3) Finding the Equation of a Line Using the Slope–Intercept Form

88) B
ID: AT3T 2.3.4–5
Diff: 0
Objective: (2.3) Finding the Equation of a Line Using the Slope–Intercept Form

89) C
ID: AT3T 2.3.4–6
Diff: 0
Objective: (2.3) Finding the Equation of a Line Using the Slope–Intercept Form

90) C
ID: AT3T 2.3.4–7
Diff: 0
Objective: (2.3) Finding the Equation of a Line Using the Slope–Intercept Form

91) C
ID: AT3T 2.3.4–8
Diff: 0
Objective: (2.3) Finding the Equation of a Line Using the Slope–Intercept Form

92) B
ID: AT3T 2.3.4–9
Diff: 0
Objective: (2.3) Finding the Equation of a Line Using the Slope–Intercept Form

93) D
ID: AT3T 2.3.4–10
Diff: 0
Objective: (2.3) Finding the Equation of a Line Using the Slope–Intercept Form

94) C
ID: AT3T 2.3.4–11
Diff: 0
Objective: (2.3) Finding the Equation of a Line Using the Slope–Intercept Form

95) C
ID: AT3T 2.3.5–1
Diff: 0
Objective: (2.3) Writing the Equation of a Line in Standard Form

96) C
ID: AT3T 2.3.5–2
Diff: 0
Objective: (2.3) Writing the Equation of a Line in Standard Form

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97) B
ID: AT3T 2.3.5–3
Diff: 0
Objective: (2.3) Writing the Equation of a Line in Standard Form

98) C
ID: AT3T 2.3.5–4
Diff: 0
Objective: (2.3) Writing the Equation of a Line in Standard Form

99) C
ID: AT3T 2.3.5–5
Diff: 0
Objective: (2.3) Writing the Equation of a Line in Standard Form

100) A
ID: AT3T 2.3.5–6
Diff: 0
Objective: (2.3) Writing the Equation of a Line in Standard Form

101) A
ID: AT3T 2.3.6–1
Diff: 0
Objective: (2.3) Finding the Slope and the y–Intercept of a Line in Standard Form

102) A
ID: AT3T 2.3.6–2
Diff: 0
Objective: (2.3) Finding the Slope and the y–Intercept of a Line in Standard Form

103) D
ID: AT3T 2.3.6–3
Diff: 0
Objective: (2.3) Finding the Slope and the y–Intercept of a Line in Standard Form

104) B
ID: AT3T 2.3.6–4
Diff: 0
Objective: (2.3) Finding the Slope and the y–Intercept of a Line in Standard Form

105) D
ID: AT3T 2.3.6–5
Diff: 0
Objective: (2.3) Finding the Slope and the y–Intercept of a Line in Standard Form

106) C
ID: AT3T 2.3.6–6
Diff: 0
Objective: (2.3) Finding the Slope and the y–Intercept of a Line in Standard Form

107) B
ID: AT3T 2.3.6–7
Diff: 0
Objective: (2.3) Finding the Slope and the y–Intercept of a Line in Standard Form

108) A
ID: AT3T 2.3.6–8
Diff: 0
Objective: (2.3) Finding the Slope and the y–Intercept of a Line in Standard Form

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109) C
ID: AT3T 2.3.6–9
Diff: 0
Objective: (2.3) Finding the Slope and the y–Intercept of a Line in Standard Form

110) C
ID: AT3T 2.3.6–10
Diff: 0
Objective: (2.3) Finding the Slope and the y–Intercept of a Line in Standard Form

111) C
ID: AT3T 2.3.7–1
Diff: 0
Objective: (2.3) Sketching Lines by Plotting Intercepts

112) A
ID: AT3T 2.3.7–2
Diff: 0
Objective: (2.3) Sketching Lines by Plotting Intercepts

113) A
ID: AT3T 2.3.8–1
Diff: 0
Objective: (2.3) Finding the Equation of a Horizontal Line and a Vertical Line

114) D
ID: AT3T 2.3.8–2
Diff: 0
Objective: (2.3) Finding the Equation of a Horizontal Line and a Vertical Line

115) D
ID: AT3T 2.3.8–3
Diff: 0
Objective: (2.3) Finding the Equation of a Horizontal Line and a Vertical Line

116) B
ID: AT3T 2.3.8–4
Diff: 0
Objective: (2.3) Finding the Equation of a Horizontal Line and a Vertical Line

117) B
ID: AT3T 2.4.1–1
Diff: 0
Objective: (2.4) Understanding the Definition of Parallel Lines

118) D
ID: AT3T 2.4.2–1
Diff: 0
Objective: (2.4) Understanding the Definition of Perpendicular Lines

119) B
ID: AT3T 2.4.3–1
Diff: 0
Objective: (2.4) Determining Whether Two Lines Are Parallel, Perpendicular, or Neither

120) B
ID: AT3T 2.4.3–2
Diff: 0
Objective: (2.4) Determining Whether Two Lines Are Parallel, Perpendicular, or Neither

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121) A
ID: AT3T 2.4.3–3
Diff: 0
Objective: (2.4) Determining Whether Two Lines Are Parallel, Perpendicular, or Neither

122) C
ID: AT3T 2.4.3–4
Diff: 0
Objective: (2.4) Determining Whether Two Lines Are Parallel, Perpendicular, or Neither

123) B
ID: AT3T 2.4.3–5
Diff: 0
Objective: (2.4) Determining Whether Two Lines Are Parallel, Perpendicular, or Neither

124) C
ID: AT3T 2.4.4–1
Diff: 0
Objective: (2.4) Finding the Equations of Parallel and Perpendicular Lines

125) C
ID: AT3T 2.4.4–2
Diff: 0
Objective: (2.4) Finding the Equations of Parallel and Perpendicular Lines

126) B
ID: AT3T 2.4.4–3
Diff: 0
Objective: (2.4) Finding the Equations of Parallel and Perpendicular Lines

127) B
ID: AT3T 2.4.4–4
Diff: 0
Objective: (2.4) Finding the Equations of Parallel and Perpendicular Lines

128) B
ID: AT3T 2.4.4–5
Diff: 0
Objective: (2.4) Finding the Equations of Parallel and Perpendicular Lines

129) A
ID: AT3T 2.4.4–6
Diff: 0
Objective: (2.4) Finding the Equations of Parallel and Perpendicular Lines

130) A
ID: AT3T 2.4.4–7
Diff: 0
Objective: (2.4) Finding the Equations of Parallel and Perpendicular Lines

131) B
ID: AT3T 2.4.4–8
Diff: 0
Objective: (2.4) Finding the Equations of Parallel and Perpendicular Lines

132) B
ID: AT3T 2.4.4–9
Diff: 0
Objective: (2.4) Finding the Equations of Parallel and Perpendicular Lines

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133) C
ID: AT3T 2.4.4–10
Diff: 0
Objective: (2.4) Finding the Equations of Parallel and Perpendicular Lines

134) B
ID: AT3T 2.4.4–11
Diff: 0
Objective: (2.4) Finding the Equations of Parallel and Perpendicular Lines

135) C
ID: AT3T 2.4.4–12
Diff: 0
Objective: (2.4) Finding the Equations of Parallel and Perpendicular Lines

136) A
ID: AT3T 2.4.4–13
Diff: 0
Objective: (2.4) Finding the Equations of Parallel and Perpendicular Lines

137) B
ID: AT3T 2.4.4–14
Diff: 0
Objective: (2.4) Finding the Equations of Parallel and Perpendicular Lines

138) C
ID: AT3T 2.4.4–15
Diff: 0
Objective: (2.4) Finding the Equations of Parallel and Perpendicular Lines

139) B
ID: AT3T 2.4.4–16
Diff: 0
Objective: (2.4) Finding the Equations of Parallel and Perpendicular Lines

140) B
ID: AT3T 2.4.5–1
Diff: 0
Objective: (2.4) Solving a Geometric Application of Parallel and Perpendicular Lines

141) C
ID: AT3T 2.4.5–2
Diff: 0
Objective: (2.4) Solving a Geometric Application of Parallel and Perpendicular Lines

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