62. Multiple Choice Which of the following is the center of the circle $(x - 3)^2 + (y + 4)^2 = 2$?

(A) $(3, -4)$ **(B)** $(-3, 4)$

(C) $(4, -3)$ **(D)** $(-4, 3)$

(E) $(3/2, -2)$

63. Multiple Choice Which of the following points is in the third quadrant?

(A) $(0, -3)$ **(B)** $(-1, 0)$

(C) $(2, -1)$ **(D)** $(-1, 2)$

(E) $(-2, -3)$

In Exercises 1–4, find which values of x are solutions of the equation.

1. $2x^2 + 5x = 3$

(a) $x = -3$ **(b)** $x = -\frac{1}{2}$ **(c)** $x = \frac{1}{2}$

2. $\frac{x}{2} + \frac{1}{6} = \frac{x}{3}$

(a) $x = -1$ **(b)** $x = 0$ **(c)** $x = 1$

3. $\sqrt{1 - x^2} + 2 = 3$

(a) $x = -2$ **(b)** $x = 0$ **(c)** $x = 2$

4. $(x - 2)^{1/3} = 2$

(a) $x = -6$ **(b)** $x = 8$ **(c)** $x = 10$

In Exercises 5–10, determine whether the equation is linear in x.

5. $5 - 3x = 0$

6. $5 = 10/2$

7. $x + 3 = x - 5$

8. $x - 3 = x^2$

9. $2\sqrt{x} + 5 = 10$

10. $x + \dfrac{1}{x} = 1$

solve the equation.

21. $\frac{1}{2}x + \frac{1}{3} = 1$

24. $3(5z - 3) - 4(2z + 1) = 5z - 2$

28. $\frac{t - 1}{3} + \frac{t + 5}{4} = \frac{1}{2}$

In Exercises 31–34, find which values of x are solutions of the inequality.

31. $2x - 3 < 7$

(a) $x = 0$ **(b)** $x = 5$ **(c)** $x = 6$

32. $3x - 4 \geq 5$

(a) $x = 0$ **(b)** $x = 3$ **(c)** $x = 4$

33. $-1 < 4x - 1 \leq 11$

(a) $x = 0$ **(b)** $x = 2$ **(c)** $x = 3$

34. $-3 \leq 1 - 2x \leq 3$

(a) $x = -1$ **(b)** $x = 0$ **(c)** $x = 2$

solve the inequality, and draw a number line graph of the solution set.

40. $-1 \leq 3x - 2 < 7$

41. $2(5 - 3x) + 3(2x - 1) \leq 2x + 1$

51. $\dfrac{2y - 3}{2} + \dfrac{3y - 1}{5} < y - 1$