Answers

1. (0, 5) is a y-intercept.

2. (3, 0) is an x-intercept.

3. (0, 0) is both the x- and y-intercept (the origin).

4. (-4, 0) is an x-intercept.

5. (0, -2) is a y-intercept.

6. x-intercept: (2, 0); y-intercept: (0, 4).

7. (0, 0) is both the x- and y-intercept.

8. (5, 3) is neither an x- nor a y-intercept.

9. x-intercept: $(-\frac{3}{2}, 0)$ or (-1.5, 0).

10. x-intercept: (4, 0).

11. No. y = 3 is horizontal and never meets the x-axis, so there is no x-intercept.

12. x-intercept: (-2, 0).

13. x-intercept: (3, 0).

14. x-intercept: (2, 0).

15. x-intercept: (0, 0).

16. x-intercept: (2, 0).

17. x-intercept: (2, 0).

18. x-intercept: $(-\frac{3}{2}, 0)$ or (-1.5, 0).

19. y-intercept: (0, 3). x-intercept: $(-\frac{3}{2}, 0)$.

20. x-intercept: (6, 0). y-intercept: (0, 4).

21. y-intercept: (0, -2). x-intercept: (-2, 0).

22. y-intercept: (0, -8). x-intercept: (2, 0).

23. x-intercept: (5, 0). y-intercept: (0, 5).

24. y-intercept: (0, 2). x-intercept: (-4, 0).

25. Both intercepts are (0, 0) — the line goes through the origin.

26. y-intercept: (0, -3). No x-intercept (horizontal line y = -3 does not meet x-axis).

27. x-intercept: $(\frac{3}{2}, 0)$. y-intercept: (0, -3).

28. y-intercept: (0, 0). x-intercept: (0, 0) — it passes through the origin.

29. x-intercept: (-2, 0). y-intercept: (0, 4).

30. y-intercept: (0, 0). x-intercept: (0, 0) — line passes through origin.

31. x-intercept: (2, 0). y-intercept: (0, 14).

Name: Due Date: Teacher: Parent Sign:

32. y-intercept: $(0, 1)$. x-intercept: $(\frac{5}{2}, 0)$.

33. $4y + 8 = 0 \rightarrow y = -2$. y-intercept: $(0, -2)$. No x-intercept.

34. Table shows y-intercept $(0, 5)$. No x-intercept in the listed points.

35. Table shows x-intercept $(-2, 0)$ and y-intercept $(0, 4)$.

36. Table shows x-intercepts $(0, 0)$, $(2, 0)$, $(4, 0)$. y-intercept: $(0, 0)$.

37. Table shows $(0, 0)$, which is both x- and y-intercept (origin).

38. Table shows y-intercept $(0, -1)$ and x-intercept $(1, 0)$.

39. Table shows y-intercept $(0, 0)$. x-intercept: $(0, 0)$ (only listed point where $y = 0$).

40. Table shows x-intercepts $(-1, 0)$, $(1, 0)$, $(2, 0)$. No y-intercept listed (no point with $x = 0$).

41. Table shows $(0, 0)$, which is both x- and y-intercept.

42. Table shows y-intercept $(0, 1)$. No x-intercept listed (no point with $y = 0$).

43. $5x + 5y = 25 \rightarrow$ divide by 5: $x + y = 5$. x-intercept: $(5, 0)$. y-intercept: $(0, 5)$.

44. $2x - 4y = 8$. Set $y = 0 \rightarrow 2x = 8 \rightarrow x = 4 \rightarrow$ x-intercept $(4, 0)$. Set $x = 0 \rightarrow -4y = 8 \rightarrow y = -2 \rightarrow$ y-intercept $(0, -2)$.

45. y-intercept: $(0, 3)$. x-intercept: set $0 = -\frac{1}{2} x + 3 \rightarrow -\frac{1}{2} x = -3 \rightarrow x = 6 \rightarrow (6, 0)$.

46. $9x + 3y = 0$. Set $x = 0 \rightarrow y = 0 \rightarrow (0, 0)$. Set $y = 0 \rightarrow x = 0 \rightarrow (0, 0)$. Both intercepts are $(0, 0)$.

47. $y = 4 \rightarrow$ y-intercept $(0, 4)$. No x-intercept.

48. $x - 2y = 10 \rightarrow$ set $y = 0 \rightarrow x = 10 \rightarrow (10, 0)$. Set $x = 0 \rightarrow -2y = 10 \rightarrow y = -5 \rightarrow (0, -5)$.

49. y-intercept: $(0, -9)$. x-intercept: set $0 = 3x - 9 \rightarrow x = 3 \rightarrow (3, 0)$.

50. $6x - y = 12 \rightarrow$ set $y = 0 \rightarrow 6x = 12 \rightarrow x = 2 \rightarrow (2, 0)$. Set $x = 0 \rightarrow -y = 12 \rightarrow y = -12 \rightarrow (0, -12)$.