

12-13 CP Pre-Calculus Chapter 1 Prerequisite Skills Answer Key

1. 18

2. 1

27. $\emptyset$

3. 9

4. -8

28. $\left\{y \mid y \leq \frac{3}{7}\right\}$ or $\left(-\infty, \frac{3}{7}\right]$

5. 45

6. -45

29. $\{y \mid -4 \leq y \leq -1\}$ or $[-4, -1]$

7. $5.3t + 5.8s$

8. $-31x - 58y$

30. $\left\{n \mid -\frac{2}{3} \leq n < 2\right\}$ or $\left[-\frac{2}{3}, 2\right)$

9. $12f - 68$

10. $-20x^2 - 18x$

31. $\{t \mid t < -6\}$ or $(-\infty, -6)$

11. $3x^3y^2 - 2x^2y^3 + \frac{1}{3}xy^4$

12. $-22r - 31s$

32. $\emptyset$

13. $-6y$

14. $-12g + 33$

33. {all real numbers} or $(-\infty, \infty)$

15. $\left\{\frac{21}{2}, -\frac{39}{2}\right\}$

16. $\left\{\frac{11}{4}, -\frac{5}{4}\right\}$

34. $\{x \mid -1 < x < 8\}$ or $(-1, 8)$

17. $\left\{\frac{14}{3}, -\frac{2}{3}\right\}$

18. $\emptyset$

35. $\{v \mid -2 < v < 4\}$ or $(-2, 4)$

19. $\left\{x \mid x > \frac{4}{9}\right\}$
 $\left(\frac{4}{9}, \infty\right)$

20. $\left\{x \mid x \leq \frac{4}{3}\right\}$
 $\left(-\infty, \frac{4}{3}\right]$

36. $\{d \mid d < -6 \text{ or } d > 8\}$ or
 $(-\infty, -6) \cup (8, \infty)$

21. $\left\{x \mid x \leq -\frac{11}{20}\right\}$
 $\left(-\infty, -\frac{11}{20}\right]$

22. $\emptyset$

37. $\left\{x \mid x \leq \frac{3}{4} \text{ or } x \geq \frac{9}{4}\right\}$ or
 $\left(-\infty, \frac{3}{4}\right] \cup \left[\frac{9}{4}, \infty\right)$

23. $\{m \mid m < -1 \text{ or } m > 3\}$
 $(-\infty, -1) \cup (3, \infty)$

24. $\{p \mid p < -1\}$
 $(-\infty, -1)$

38. $\{y \mid -33 < y < -31\}$ or
 $(-33, -31)$

25. $\left\{y \mid y < \frac{3}{2}\right\}$

26. {all real numbers}

39. {all real numbers} or $(-\infty, \infty)$

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

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

40. $\{x | -4 \leq x \leq -3 \text{ or } 3 \leq x \leq 6\}$ or $[-4, -1] \cup [3, 6]$

41. -1

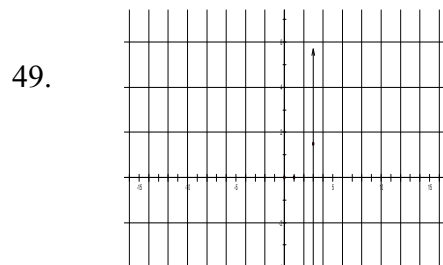
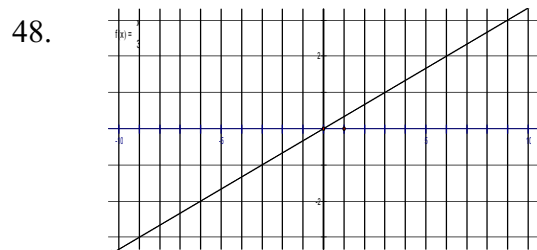
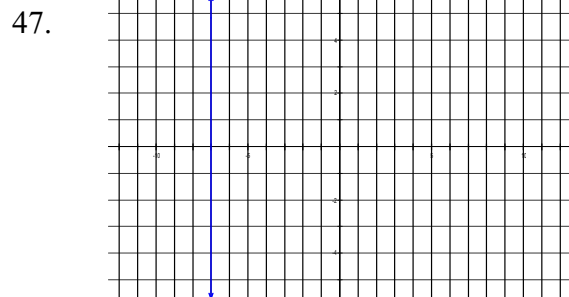
42. $-\frac{105}{8}$

43. 0

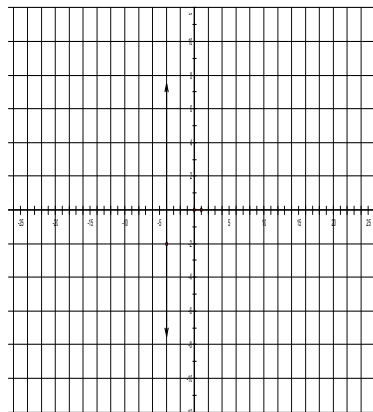
44. $-\frac{2}{3}$

45. x -int: $\left(6\frac{3}{4}, 0\right)$
 y -int: $(0, -9)$

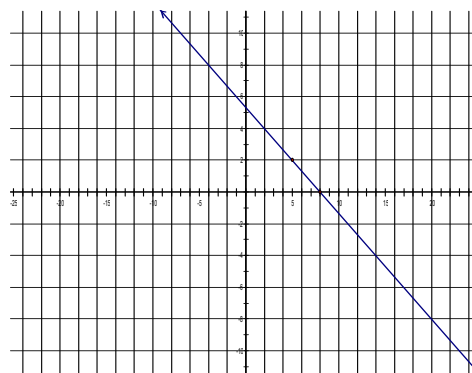
46. x -int: $\left(13\frac{1}{3}, 0\right)$
 y -int: $(0, -60)$



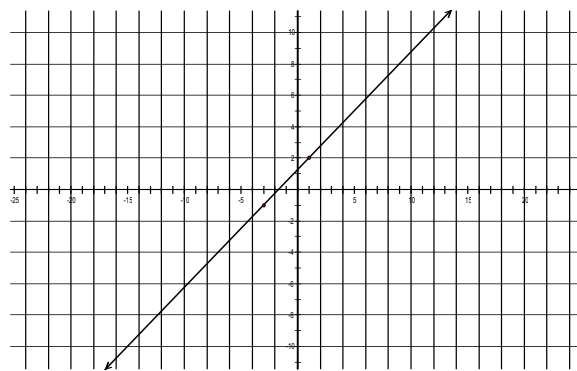
50.



51.



52.



$$53. \quad 6x - 30y = -43$$

$$54. \quad 2x - 5y = 16$$

$$55. \quad x = -2$$

$$56. \quad y = 0$$

$$57. \quad y = 6$$

$$58. \quad x = -4$$

$$59. \quad x + 2y = 5$$

$$60. \quad \{1, 6\}$$

$$61. \quad \{-7, -5\}$$

$$62. \quad \{3\}$$

$$63. \quad \{2, 7\}$$

$$64. \quad \left\{ \frac{-7 + \sqrt{129}}{2}, \frac{-7 - \sqrt{129}}{2} \right\}$$

$$65. \quad \left\{ \frac{13 + \sqrt{29}}{2}, \frac{13 - \sqrt{29}}{2} \right\}$$

$$66. \quad \{0, -5y\}$$

$$66. \quad \{-6y, -2y\}$$

$$67. \quad \left\{ 3, \frac{7}{6} \right\}$$

$$68. \quad \left\{ 0, \frac{3}{2}, \frac{6}{5} \right\}$$

69. $\left\{\frac{9}{2}, -\frac{8}{3}\right\}$

70. $\left\{\frac{4}{7}, 2\right\}$