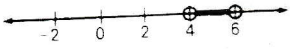
PAGES 155–157 **1.** $6t^3 + 11t^2 + 2t - 8$ **2.** $x + 5$
3. $64x^{16}y^5$ **4.** 51 **5.** $\frac{b^2 - 11b - 8}{b(b+1)}$ **6.** $\frac{4}{7}$ **7.** $6\sqrt{5}$ **8.** $12st^2\sqrt{t}$
9. $5\sqrt{7}$ **10.** $\frac{6}{5}x^3$ **11.** Alice, $3x + 7$; Archie, $x + 7$
12. 30 cm × 54 cm **13.** $(3x - 2)(x + 1)$ **14.** prime **15.** prime
16. prime **17.** $-(3y + 1)(16y - 15)$ **18.** $(3c + 4d)(c - 3d)$
19. 63 **20.** $3\frac{1}{2}$ h **21.** $\frac{4x-4}{12}, \frac{3x}{12}, \frac{6}{12}$

22. $x > -3$

23. $-4 \le x \le 0$

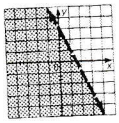
24. $z > 3$ or $z < 2$

25. $4 < t < 6$

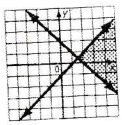


26. 6.8 **27.** 9.7 **28.** $\frac{11}{21}$ **29.** $x = 7$ **30.** $x = 11$ **31.** $y = \frac{4}{9}$
32. $y < \frac{20}{9}$ **33.** $t = 4$ or $t = -4$ **34.** $t = -3$ **35.** $t > 2\frac{1}{2}$
36. $x = -7$ or $x = 1$ **37.** $x = 17, y = -10$ **38.** $x = 1, y = -1$
39. $3y - 14 + \frac{57}{y+4}$ **40.** 42, 40 **41.** no real-number roots
42. one real-number root **43.** 14 **44.** 0.72 **45.** $0.8\overline{6}$ **46.** $1.\overline{4}$

47.



48.



49. $110 + 7\sqrt{35}$ **50.** 18 **51.** $70 - 20\sqrt{10}$ **52.** $\frac{2}{3}$
53. $24\sqrt{3} - 15\sqrt{2}$ **54.** $3\sqrt{5}$ **55.** $x + y = -2$ **56.** $t = -1$ or $t = -\frac{2}{3}$ **57.** $z = \frac{7+\sqrt{17}}{4}$ or $z = \frac{7-\sqrt{17}}{4}$
58. $4\frac{1}{3}$ **59.** -2 **60.** $9a^2c^2$ **61.** 3^6, or 729
62. $6 - \sqrt{3}, 6 + \sqrt{3}$