

SECTION 2.5

1. 7 and -7 3. 4 and -4 5. 6 and -6 7. 7 and -7 9. There is no solution. 11. There is no solution.
13. -5 and 1 15. 2 and 8 17. 2 19. There is no solution. 21. 3 and $-\frac{3}{2}$ 23. $\frac{3}{2}$ 25. There is no solution.
27. -3 and 7 29. $-\frac{10}{3}$ and 2 31. 3 and 1 33. $\frac{3}{2}$ 35. There is no solution. 37. $-\frac{1}{6}$ and $\frac{11}{6}$
39. -1 and $-\frac{1}{3}$ 41. There is no solution. 43. 0 and 3 45. There is no solution. 47. $\frac{13}{3}$ and 1
49. There is no solution. 51. $\frac{1}{3}$ and $\frac{7}{3}$ 53. $-\frac{1}{2}$ 55. $-\frac{7}{2}$ and $-\frac{1}{2}$ 57. $\frac{10}{3}$ and $-\frac{8}{3}$ 59. There is no solution.
61. $\{x \mid x > 3 \text{ or } x < -3\}$ 63. $\{x \mid x > 1 \text{ or } x < -3\}$ 65. $\{x \mid 4 \leq x \leq 6\}$ 67. $\{x \mid x \geq 5 \text{ or } x \leq -1\}$
69. $\{x \mid -3 < x < 2\}$ 71. $\left\{x \mid x > 2 \text{ or } x < -\frac{14}{5}\right\}$ 73. The solution set is the empty set. 75. The solution set is the set of real numbers.
77. $\left\{x \mid x \leq -\frac{1}{3} \text{ or } x \geq 3\right\}$ 79. $\left\{x \mid -2 \leq x \leq \frac{9}{2}\right\}$ 81. $\{x \mid x = 2\}$
83. $\left\{x \mid x < -2 \text{ or } x > \frac{22}{9}\right\}$ 85. $\left\{x \mid -\frac{3}{2} < x < \frac{9}{2}\right\}$ 87. $\left\{x \mid x < 0 \text{ or } x > \frac{4}{5}\right\}$ 89. $\{x \mid x > 5 \text{ or } x < 0\}$
91. Lower limit: 1.742 in.; upper limit: 1.758 in. 93. Lower limit: 195 volts; upper limit: 245 volts 95. Lower limit: $9\frac{19}{32}$ in.; upper limit: $9\frac{21}{32}$ in. 97. Lower limit: 28,420 ohms; upper limit: 29,580 ohms 99. Lower limit: 23,750 ohms;
- upper limit: 26,250 ohms 101a. $\{x \mid x \geq -3\}$ b. $\{a \mid a \leq 4\}$ 103a. \leq b. \geq c. \geq d. $=$ e. $=$