

SECTION 8.3

1. 5 and -2 3. 4 and -9 5. $4 + 2\sqrt{22}$ and $4 - 2\sqrt{22}$ 7. 3 and -8 9. -3 and $\frac{1}{2}$ 11. $\frac{3}{2}$ and $-\frac{1}{4}$
13. 2 and 12 15. $\frac{1 + \sqrt{3}}{2}$ and $\frac{1 - \sqrt{3}}{2}$ 17. $-1 + i$ and $-1 - i$ 19. $1 + 2i$ and $1 - 2i$ 21. $2 + 3i$ and $2 - 3i$
23. $\frac{1}{2} + \frac{3}{2}i$ and $\frac{1}{2} - \frac{3}{2}i$ 25. $-\frac{3}{2} + \frac{1}{2}i$ and $-\frac{3}{2} - \frac{1}{2}i$ 27. $\frac{3}{4} + \frac{3\sqrt{3}}{4}i$ and $\frac{3}{4} - \frac{3\sqrt{3}}{4}i$ 29. Two complex number solutions
31. One real number solution 33. Two real number solutions 35. $\{p \mid p < 9\}$ 37. $\{p \mid p > 1\}$ 41. Yes
- 43a. $x = 1.05$; will increase b. $x = 0.96$; will decrease