

Answer Key

Practice B

1. -11 2. 25 3. 0 4. -76 5. 49
6. 100 7. 1; 2 8. 0; 1 9. -8; 0
10. -47; 0 11. 37; 2 12. 9; 2 13. -4, 5
14. $-\frac{1}{2}, 2$ 15. $\frac{-1 - \sqrt{33}}{4}, \frac{-1 + \sqrt{33}}{4}$
16. $\frac{1}{4}, 2$ 17. $\frac{-1 - \sqrt{51}}{10}, \frac{-1 + \sqrt{51}}{10}$
18. $\frac{-7 - \sqrt{113}}{-16}, \frac{-7 + \sqrt{113}}{-16}$
19. $x^2 - 4x - 2 = 0$; $2 - \sqrt{6}, 2 + \sqrt{6}$
20. $x^2 - 3x - 4 = 0$; -1, 4
21. $2x^2 + x - 7 = 0$; $\frac{-1 - \sqrt{57}}{4}, \frac{-1 + \sqrt{57}}{4}$
22. $3x^2 + 3x - 5 = 0$; $\frac{-3 - \sqrt{69}}{6}, \frac{-3 + \sqrt{69}}{6}$
23. $2x^2 - 5x - 1 = 0$; $\frac{5 - \sqrt{33}}{4}, \frac{5 + \sqrt{33}}{4}$
24. $4x^2 + 3x - 2 = 0$; $\frac{-3 - \sqrt{41}}{8}, \frac{-3 + \sqrt{41}}{8}$
25. $2x^2 - 15x + 17 = 0$; $\frac{15 - \sqrt{89}}{4}, \frac{15 + \sqrt{89}}{4}$
26. $2.4x^2 - 3.5x - 2.2 = 0$; 1.933, -0.474
27. $4.2x^2 - 6.8x + 2 = 0$; 0.386, 1.233
28. Yes; Your garden should be approximately 12.93 ft by 27.07 ft. 29. No; The area of the room can be expressed as $x(8 - x)$. The equation $x(8 - x) = 20$ has no real solution.
30. 10.22 seconds 31. $h = -16t^2 + 27t + 6$
32. 1.89 seconds