Solve. (11-10)

142. $\sqrt{m} = 7$

143. $\sqrt{6x} = \frac{3}{2}$

144. $\sqrt{a} - 5 = 4$

145. $\frac{1}{5} + \sqrt{y} = 1$

146. $\sqrt{\frac{x}{3}} = 6$

147. $\sqrt{n-2} = 9$

148. $4\sqrt{5t} = 8$

149. $\sqrt{3z} + 2 = 5$

150. $\sqrt{4k-5} + 1 = 8$

151. $\sqrt{\frac{5u}{2}} - 3 = -2$

152. $\sqrt{\frac{4c-3}{7}} = 3$

153. $8\sqrt{n} = 24\sqrt{5}$

Chapter 12

Solve. Express irrational solutions in simplest radical form. If the equation has no solution, write "no solution." (12-1)

1. $m^2 = \frac{25}{49}$

2. $5a^2 = 60$

3. $w^2 + 52 = 0$

4. $x^2 - 108 = 0$

5. $7u^2 - 112 = 0$

6. $4c^2 + 7 = 23$

7. $3t^2 - 12 = -3$

8. $2n^2 + 9 = 4$

9. $(v + 5)^2 = 16$

10. $(z - 5)^2 = 6$

11. $3(k + 4)^2 = 81$

12. $4(f - 1)^2 = 60$

13. $2(h + 7)^2 = 42$

14. $(2x + 3)^2 = 100$

15. $7(3y - 1)^2 = 168$

16. $e^2 + 6e + 9 = 64$

17. $a^2 - 12a + 36 = 49$

18. $m^2 + 18m + 81 = 36$

Use the quadratic formula to solve each equation. Give irrational roots in simplest radical form and then approximate them to the nearest tenth. (12-3)

31. $z^2 + 7z + 3 = 0$

32. $w^2 + 8w - 4 = 0$

33. $2u^2 - 10u - 6 = 0$

34. $5y^2 = -9y - 1$

35. $3k^2 + 2 = 5k$

36. $6m = 3 - 2m^2$

37. $x^2 + 0.3x - 0.2 = 0$

38. $n^2 + \frac{2}{3}n - \frac{1}{2} = 0$

39. $\frac{1}{2}y^2 - \frac{7}{2}y = 1$