Lesson 6.5 Practice: Solving Radical Equations

School Launch · Algebra II · Unit 6: Radicals and Rational Exponents · Worksheet A

Calculator for decimals

Name _____ Date _____ Score _____ / 10

Show your work under each problem, one step per line, and check your answer. Word problems: name the unknown, write the equation, solve, and answer in a sentence with units.

1. Solve: $\sqrt{x + 1} = 4$. EASY

2. Solve: $\sqrt{x + 2} = 3$. EASY

3. Solve: $\sqrt{x + 2} = 5$. EASY

4. Solve: $\sqrt{x + 4} = 5$. MEDIUM

5. Solve: $\sqrt{x + 3} = 4$. MEDIUM

6. Solve: $\sqrt{x + 3} = 1$. MEDIUM

7. Solve: $\sqrt{x + 1} = 6$. MEDIUM

8. Solve and check for extraneous roots: $\sqrt{x - 4} = x - 4$. HARD

9. Solve and check for extraneous roots: $\sqrt{x + 1} = x - 5$. HARD

10. Solve and check for extraneous roots: $\sqrt{x + 1} = x - 1$. HARD