Lesson 6.1 Practice: nth Roots and Rational Exponents

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. Evaluate without a calculator: $8^{\frac{1}{3}}$. EASY

2. Evaluate without a calculator: $9^{\frac{1}{2}}$. EASY

3. Evaluate without a calculator: $4^{\frac{1}{2}}$. EASY

4. Evaluate without a calculator: $125^{\frac{2}{3}}$. MEDIUM

5. Evaluate without a calculator: $25^{\frac{2}{2}}$. MEDIUM

6. Evaluate without a calculator: $25^{\frac{1}{2}}$. MEDIUM

7. Evaluate without a calculator: $16^{\frac{4}{2}}$. MEDIUM

8. Evaluate without a calculator: $4^{-\frac{3}{2}}$. HARD

9. Evaluate without a calculator: $25^{-\frac{3}{2}}$. HARD

10. Evaluate without a calculator: $64^{-\frac{1}{3}}$. HARD