Lesson 10.2 Practice: Quotients and Rationalizing Denominators

School Launch · Algebra I · Unit 10: Radicals · Worksheet A

No calculator

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. Simplify and rationalize the denominator: $\frac{1}{\sqrt{7}}$. EASY

2. Simplify and rationalize the denominator: $\frac{5}{\sqrt{2}}$. EASY

3. Simplify and rationalize the denominator: $\frac{4}{\sqrt{7}}$. EASY

4. Simplify and rationalize the denominator: $\frac{9\sqrt{14}}{\sqrt{14}}$.

MEDIUM

5. Simplify and rationalize the denominator: $\frac{5\sqrt{10}}{\sqrt{3}}$.

MEDIUM

6. Simplify and rationalize the denominator: $\frac{7\sqrt{6}}{\sqrt{3}}$. MEDIUM

7. Simplify and rationalize the denominator: $\frac{3\sqrt{5}}{\sqrt{10}}$. MEDIUM

8. Simplify and rationalize the denominator: $\frac{1}{2+\sqrt{7}}$. HARD

9. Simplify and rationalize the denominator: $\frac{5}{3+\sqrt{5}}$. HARD

10. Simplify and rationalize the denominator: $\frac{6}{2+\sqrt{7}}$.

HARD