Lesson 10.1 Practice: Simplifying Square Roots

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: $\sqrt{32}$. EASY

2. Simplify: $\sqrt{20}$. EASY

3. Simplify: $\sqrt{27}$. EASY

4. Simplify (assume $x > 0$): $\sqrt{72x^{7}}$. MEDIUM

5. Simplify (assume $x > 0$): $\sqrt{98x^{5}}$. MEDIUM

6. Simplify (assume $x > 0$): $\sqrt{150x^{3}}$. MEDIUM

7. Simplify (assume $x > 0$): $\sqrt{192x^{7}}$. MEDIUM

8. Simplify: $4\sqrt{96} - \sqrt{150}$. HARD

9. Simplify: $3\sqrt{98} - \sqrt{8}$. HARD

10. Simplify: $4\sqrt{45} - \sqrt{180}$. HARD