Lesson 5.1 Practice: Rational Expressions: Simplifying, Multiplying and Dividing

School Launch · Algebra II · Unit 5: Rational Expressions and Functions · 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. Simplify and state excluded values: $\frac{x^2-3x-10}{x^2+6x+8}$. EASY

2. Simplify: $\frac{x-2}{x^2+4x-5} \cdot \frac{x^2+7x+10}{3x-6}$. EASY

3. Simplify and state excluded values: $\frac{x^2-x-12}{x^2+x-20}$. EASY

4. Simplify: $\frac{x-4}{x^2-x-30} \cdot \frac{x^2+4x-5}{3x-12}$. MEDIUM

5. Simplify and state excluded values: $\frac{x^2+4x+3}{x^2-9}$. MEDIUM

6. Simplify: $\frac{x+5}{x^2-1} \cdot \frac{x^2+5x-6}{2x+10}$. MEDIUM

7. Simplify and state excluded values: $\frac{x^2-11x+30}{x^2-6x+5}$.

MEDIUM

8. Simplify: $\frac{x+2}{x^2+5x-6} \div \frac{2x+4}{x^2+2x-24}$. HARD

9. Simplify and state excluded values: $\frac{x^2-3x-4}{x^2+x-20}$. HARD

10. Simplify: $\frac{x+1}{x^2-9} \div \frac{3x+3}{x^2-4x+3}$. HARD