

Name _____

Rational Expression Worksheet #1: Simplifying

Simplify.

1. $\frac{18x^6}{27x^4}$

2. $\frac{3x^2}{12x}$

3. $\frac{10a^3b}{-15ab^3}$

4. $\frac{36k^3m}{24k^4mn^5}$

5. $\frac{12x^2}{9x^2y}$

6. $\frac{42x^2}{-36x^3}$

7. $\frac{16a^2b^3c^4}{20a^7b^2c^2}$

8. $\frac{120x^3y}{25xy^5}$

9. $\frac{-16x^2y^7}{12x^5y^3z^4}$

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Rational Expression Worksheet #2: Simplifying

Simplify (*remember to factor when necessary*).

1. $\frac{2x+6}{4x-12}$

2. $\frac{x^2+9x+20}{2x+8}$

3. $\frac{6x+24}{x^2+7x+12}$

4. $\frac{3x+18}{x^2+6x}$

5. $\frac{3x-12}{3x^2-12x}$

6. $\frac{x^2-5x+6}{x^2+2x-15}$

7. $\frac{4x+4}{x^2+4x+3}$

8. $\frac{x^2-x-12}{x^2-2x-8}$

9. $\frac{x^2-5x+4}{x^2-4x}$

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Rational Expression Worksheet #3: Simplifying

Simplify. Remember to factor if necessary

1. $\frac{28x^3}{35x^5}$

2. $\frac{5x+40}{4x+32}$

3. $\frac{36y^2}{12y}$

4. $\frac{x^2+12x+20}{3x+6}$

5. $\frac{6x+30}{x^2+8x+15}$

6. $\frac{25a^3b^7}{-15a^8b^3}$

7. $\frac{5x-15}{x^2-3x}$

8. $\frac{38k^2m^2n}{24k^4mn^5}$

9. $\frac{7x-14}{x^2-2x}$

10. $\frac{-16x^2y^5z}{8x^3y^2z^2}$

11. $\frac{x^2-6x+8}{x^2+2x-24}$

12. $\frac{9x+9}{x^2+8x+7}$

13. $\frac{x^2+3x-28}{x^2-2x-8}$

14. $\frac{x^2-7x+6}{x^2-6x}$

15. $\frac{36a^5b^2c^6}{42a^7b^2c^2}$