SM 3H

DATE: SECTION:

OBJECTIVE:

Review

Rational Number:

Exrpession:

Rational Expression:

Simplify: $\frac{6}{8}$ **WAY 1:**

WAY 2:

Steps for simplifying rational expressions

1. FACTOR!!!!!!! Types:

2. Make ones.

3. Write what is left. DO NOT MULTYPLY!

EXAMPLES: Simplify.

1. $\frac{4x^3y^4}{6xy^6z}$

2. $\frac{x^2+x-12}{x^2-2x-24}$

3. $\frac{4x^2+2x+1}{8x^3-1}$

4. $\frac{5x^2-5x}{1-x}$

5. $\frac{4x^2-5x-6}{3x^2+2x-16}$

6. $\frac{3b^2-20b-32}{7b-56}$

7. $\frac{4x^2+25x-21}{16x^2-9}$

REVIEW

1. $\frac{14}{27} \div \frac{7}{9}$

STEPS FOR MULTIPLING AND DIVIDING RATIONAL EXPRESSIONS

1. FACTOR!!!!!!!!!!

2. **IF** divide, do stay change filp.

3. Make ones.

4. Write what is left. DO NOT MULTIPLY!

EXAPMLES: Simplify.

1. $\frac{x}{2} \div \frac{3x}{5}$

2. $\frac{9x}{25y^2} \cdot \frac{5y^5}{18x^3}$

3. $\frac{2x-10}{x^2-x-12} \cdot \frac{x-3}{x-5}$

4. $\frac{5x-10}{3x^2-5x-2} \div \frac{10}{9x^2-1}$

5. $\frac{8x^3-27}{8x^2-10x-3} \cdot \frac{12x+3}{20x^2+30x+45}$

6. $\frac{7x^2+35x+28}{x+1} \div \frac{x^2-16}{x^2+6x-7}$