Rational Expressions Operations

Definition of rational expression:

Simplifying Rational Expressions

1.

2.

3.

Adding & Subtracting Rational Expressions

1.

2.

3.

4.

5.

EXAMPLE:

$$\frac{2x+4}{x^2-4}$$

EXAMPLE:

$$\frac{5}{3x+12} - \frac{7}{9x+36}$$

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EXAMPLE:

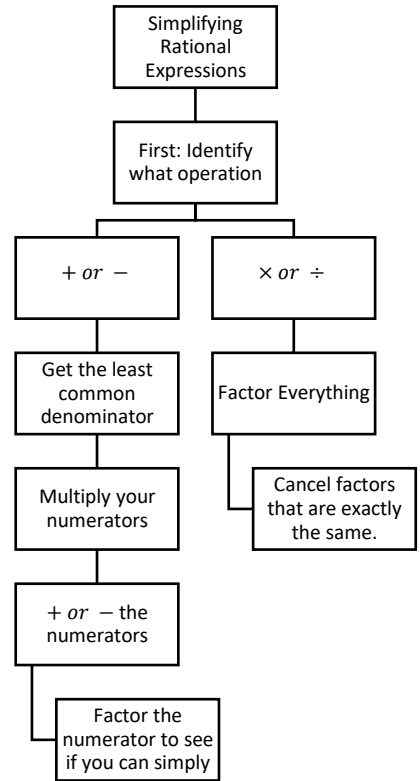$$\frac{2x+4}{x^2-4}$$

EXAMPLE:

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Multiplying & Dividing Rational Expressions

1.

2.

3.

4.

EXAMPLE:

$$\frac{35x^2}{x+10} \div \frac{2x-10}{x^2+5x-50}$$

Simplifying Rational Expressions

First: Identify what operation

$+ \; or \; -$

$\times \; or \; \div$

Get the least common denominator

Factor Everything

Multiply your numerators

Cancel factors that are exactly the same.

$+ \; or \; -$ the numerators

Factor the numerator to see if you can simply