

# Warm-Up

**CST: Algebra 2, 7.0/A.APR.7**

## Connecting Fractions and Rational Expressions: A Look Through the Grades

What “math”



**Example 2:** Simplify. (Multiply.)

- Prompt students: What operation do we see here? How do

**You Try!** Simplify. Multiply or divide. (Use Sage/Scribe for this example.)

$$\frac{x}{x + x} \div \frac{x}{x +}$$

$$= \frac{x}{x + x} \div \frac{x}{x +}$$

$$= \left( x \right.$$

**Example 5:** Simplify. (Subtract the fractions.)

- Prompt students: What operation do you see? What do we need in order to subtract these fractions? How will we find it and create common denominators? (Turn and talk to your partner, justify!)

Pre-Algebra	Algebra 1	Algebra 2
$\frac{5}{+3} - \frac{2}{^2+5 +6}$	$= \frac{5}{+3} - \frac{2}{^2+5 +6} = (+3)(+2)$	
$= \frac{5}{+3} - \frac{2}{^2+5 +6}$	$= \frac{5}{(+3)}$	
$= \frac{5}{+3}$		
$= \frac{5}{+3}$		

**You Try!** Simplify.

- Have students work in pairs. Play “Pass the Pen” to debrief.

$$\frac{4x}{x-3} \cdot \frac{4x}{x-6}$$

$$\frac{4x(x-6)}{(x-3)(x-6)} \cdot \frac{4x(x-3)}{(x-6)(x-3)}$$

$$4x^2 - 24x$$

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