11.7 Mixed Expressions and Complex Fractions
DAY 2

$$\frac{3+\frac{m-2}{m+2}}{\frac{m^2-1}{6}}$$

$$\frac{5x+\dfrac{5x}{x-2}}{\dfrac{10}{x^2-5x+6}}$$

11.8 Rational Equations: equations that contain one or more rational expressions

1. Solve using cross products:

When a rational equation is a proportion, use cross products to solve it

recall a proportion: $\frac{a}{b} = \frac{c}{d}$

Example 1: $\frac{7}{y-3} = \frac{3}{y+1}$

Example 2: $\frac{13}{10} = \frac{2x + 0.2}{7}$

2. Solve using LCD:

To solve any rational equation, multiply all terms by the LCD:

Solve: $\frac{2p-5}{p-2} - 2 = \frac{3}{p+2}$

Solve:

$$1+\frac{1}{c+2}=\frac{28}{c^2+2c}$$

Solve:

$$\frac{n}{3n+6} - \frac{n}{5n+10} = \frac{2}{5}$$