

Warmup:

$$\begin{aligned} -1 < x < .3 \\ x > 2 \end{aligned}$$

 $(x+1)(x-2)$

$$\frac{x-3}{(x+1)} < \frac{x+3}{x-2}$$

 $x \neq -1, 2$

$$\frac{0}{4} < \frac{6}{1}$$

$$0 < 6$$

$$(x-2)(x-3) = (x+3)(x+1)$$

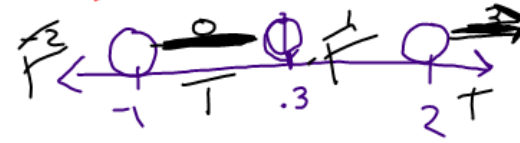
$$\begin{array}{r} x^2 - 5x + 6 \\ -x^2 + 5x - 6 \\ \hline 9x - 3 \end{array}$$

 $0 =$

$$9x - 3$$

$$\frac{3}{9} = \frac{9 \cdot x}{9}$$

$$x = .3$$



$$\frac{-5}{-1} < \frac{1}{-4} \quad \frac{-2}{2} < \frac{4}{-1}$$

$$5 < -.25 \quad -1 < -4$$

$$\frac{-3}{1} < \frac{3}{-2} \quad -3 < -1.5$$

Example 3:

$$\frac{x+2}{x-3} > 6$$

$$4x + 3 < \frac{1}{x}$$

$x \neq$

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$$\frac{1}{x+2} - \frac{x}{2-x} \leq \frac{x+6}{x^2-4}$$

Homework:

Solving Rational
Inequalities