

Section 6-5: Solving Rational Equations

Warm-up

1. What LCD would clear $\frac{2}{5} + \frac{3}{4} = \frac{6}{x^2}$? (What would I multiply both sides by to get rid of the fractions?)
2. Is 0 a possible solution of $-1 + 1 = \frac{3}{x}$? Why or Why not?
3. Solve for x: $4 = 3x + 1$

Solutions of Rational Expressions:

➤ **VOCAB:** A rational equation is an _____

Examples would include:

➤ What do we need to do to solve rational expressions?

- _____
- _____
- _____
- _____

EXAMPLE#1: Solve for x

1) $\frac{1}{x} = \frac{2}{3}$

2) $\frac{x}{2} = \frac{3}{x-4}$

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