

Solving Rational Equations



Did someone order a fat stack of fractions?

Does it come with a side of tears?



The **Fraction Buster Technique** or **Cross-Multiplying** to solving linear equations with fractions containing constants

$$\frac{2}{3}x - 5 = \frac{1}{2}$$

$$\frac{x}{5} + \frac{1}{4} = \frac{x}{20}$$

$$\frac{x}{x-5} = \frac{2}{5}$$

Solving Rational Equations that contain polynomials in the numerator and/or denominator

$$\frac{5x+5}{x+2} + 3x = \frac{x^2}{x+2}$$

ALWAYS CHECK YOUR SOLUTION!

Solving Rational Equations that contain polynomials in the numerator and/or denominator

$$\frac{x}{x+2} + \frac{1}{x+1} = \frac{5}{x^2+3x+2}$$

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Solving Rational Equations that contain polynomials in the numerator and/or denominator

$$\frac{5}{x^2-7x+12} = \frac{2}{x-3} + \frac{5}{x-4}$$

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