

Toolkit #12: Fraction Busters

Example

$$b\left(\frac{5x}{3} + \frac{15}{2} = \frac{5}{2}\right) \text{ LCD: } 6$$

$$2b\left(\frac{5x}{3}\right) + 3b\left(\frac{15}{2}\right) = 3b\left(\frac{5}{2}\right)$$

$$2(5x) + 3(15) = 3(5)$$

$$10x + 45 = 15$$

$$-45 \quad -45$$

$$10x = -30$$

$$\frac{10}{10} \quad \frac{10}{10}$$

$$x = -3$$

① Identify Lowest Common Denominator (LCD).

② Multiply everything in the equation by the LCD.

③ Simplify denominator & rewrite

④ Multiply what is left in the numerator & solve.

Clearing Decimals in an Equation

Example

GCPV: 100 $14 - 0.35x = 0.75x + 3$

$$100(14 - 0.35x = 0.75x + 3)$$

$$1400 - 35x = 75x + 300$$

$$+35x \quad +35x$$

$$1400 = 110x + 300$$

$$-300 \quad -300$$

$$\frac{1100}{110} = \frac{110x}{110}$$

$$10 = x$$

① Find the decimal place furthest to the right (Greatest Common Place Value, GCPV)

② Multiply the whole equation by the GCPV

③ Once the decimal is cleared solve as usual