

M9

Solving Equation with Fractions

3.6 Part 1

Distributive Property with Fractions:

$2\left(5 + \frac{x}{4}\right)$	$-\left(\frac{x}{7} - 3\right)$
$6\left(9x + \frac{2}{5}\right)$	$-4\left(3y + \frac{9}{11}\right)$

Removing Fractions from Equations

1. Equations with one fraction or with fractions that all have the same denominator.

- Put each side in brackets.
- Multiply each side by the denominator.
- Reduce and multiply.
- Solve

Examples: **Remove fractions. Do not solve.**

$$2x + \frac{1}{4} = 5$$

$$6x - \frac{3}{10} = \frac{13}{10}$$

$$6x + 5 = \frac{4}{7}$$

$$\frac{2x}{3} - 9 = -\frac{8}{3}$$

Examples: Solve Equations. Start with removing fractions from both sides.

$$-x + \frac{3}{10} = 2$$

$$4x - \frac{2}{7} = -\frac{5}{7}$$

$$3x - 12 = \frac{2}{3}$$

$$\frac{4x}{15} - 2 = -\frac{8}{15}$$