

# Solving Algebraic Equations Containing Fractions

(Deal with Fractions)

MrB4math.com

$$\begin{array}{r} 1) \quad x - \frac{3}{7} = \frac{2}{7} \\ \quad \quad + \frac{3}{7} \quad + \frac{3}{7} \\ \hline x = \frac{5}{7} \end{array}$$

$$\begin{array}{r} 2) \quad \frac{4}{3} \cdot \frac{3}{4} a = \frac{2}{5} \cdot \frac{4}{3} \\ \hline a = \frac{8}{15} \end{array}$$

$$\begin{array}{r} 3) \quad \frac{1}{3} \cdot -\frac{4}{5} = \frac{3}{1} y \cdot \frac{1}{3} \\ \hline -\frac{4}{15} = y \end{array}$$

$$\begin{array}{r} 4) \quad x - \frac{4}{5} = \frac{2}{15} \\ \quad \quad + \frac{4}{5} \quad + \frac{12}{15} \\ \hline x = \frac{14}{15} \end{array}$$

$$\begin{array}{r} 5) \quad \frac{1}{10} - \frac{1}{6} r = -\frac{3}{10} \\ \quad \quad -\frac{1}{10} \quad \quad -\frac{1}{10} \\ \hline -\frac{6}{1} \cdot -\frac{1}{6} r = -\frac{4}{5} \cdot \frac{3}{1} \\ \hline r = \frac{12}{5} \text{ or } 2\frac{2}{5} \end{array}$$

$$\begin{array}{r} 6) \quad -3\frac{4}{7} x = 5 \\ \quad \quad -\frac{7}{25} \cdot -\frac{25}{7} x = \frac{5}{1} \cdot -\frac{7}{25} \\ \hline x = -\frac{7}{5} \text{ or } 1\frac{2}{5} \end{array}$$

# Solving Algebraic Equations Containing Fractions

(Deal with Fractions)

MrB4math.com

7)

$$\frac{7}{7}k + 4 - \frac{1k}{7} = \frac{2}{3}$$

$$\boxed{-4} \quad \boxed{-\frac{12}{3}}$$


---


$$\frac{7}{6} \cdot \frac{6}{7} k = -\frac{5 \cdot 10}{3 \cdot 36} \cdot \frac{7}{7}$$

$$K = -\frac{35}{9}$$

$$\text{or } -3\frac{8}{9}$$

8)

$$\frac{1y}{4} - \frac{4}{4}y = \frac{2}{9} - \frac{5}{9}$$

$$-\frac{4}{3} \cdot -\frac{3}{4}y = -\frac{3}{9} \cdot -\frac{4}{18}$$

$$y = \frac{4}{9}$$

9)

$$\frac{3 \cdot 3}{4 \cdot 3} + \frac{1r}{15} - \frac{5 \cdot 2}{6 \cdot 2} = \frac{8}{15}r$$

$$-\frac{1}{15}r \quad -\frac{1}{15}r$$


---


$$\frac{15 \cdot 5}{7 \cdot 4 \cdot 12} - \frac{1}{12} = \frac{7}{15}r \cdot \frac{15}{7}$$

$$-\frac{5}{28} = r$$

10)

$$\frac{3 \cdot 2}{10 \cdot 2} = 7x + \frac{1}{4} - 10x$$

$$\boxed{-\frac{5}{20}} \quad \boxed{-\frac{1}{4}}$$


---


$$-\frac{1}{3} \cdot \frac{1}{20} = -\frac{3}{1}x \cdot -\frac{1}{3}$$

$$-\frac{1}{60} = x$$