Solving Algebraic Equations Containing Fractions
(Clear of Fractions) *(Sheet A)* MrB4math.com

1) 5 LCD

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

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

$$\frac{3}{10} = x$$

2) 10 LCD

$$r - 2 - \frac{r}{10} = \frac{3}{5}$$

$$10r - 20 - 1r = 6$$
$$+20 \quad +20$$

$$\frac{9r}{9} = \frac{26}{9}$$

$$r = \frac{26}{9} \text{ or } 2\frac{8}{9}$$

3) 12 LCD

$$\frac{1}{4} - \frac{r}{6} = -\frac{5}{12}$$

$$3 - 2r = -5$$
$$-3 \quad -3$$

$$\frac{-2r}{-2} = \frac{-8}{-2}$$

$$r = 4$$

4) You could multiply by LCD first, but $\frac{7}{10} - \frac{3}{10}$ first seems easiest. 20 LCD

$$\frac{y}{4} - y = \frac{7}{10} - \frac{3}{10}$$

$$\frac{y}{4} - y = \frac{4}{10}$$

$$5y - 20y = 8$$

$$\frac{-15y}{-15} = \frac{8}{-15}$$

$$y = -\frac{8}{15}$$

5) You must convert mixed number to improper fraction before multiplying. 7 LCD

$$3\frac{1}{7}x = 2$$

$$\frac{22}{7}x = 2$$

$$\frac{22x}{22} = \frac{14}{22}$$

$$x = \frac{7}{11}$$

6) 13 LCD

$$-\frac{7}{13} = x + \frac{4}{13}$$

$$-7 = 13x + 4$$
$$-4 \quad -4$$

$$\frac{-11}{13} = \frac{13x}{13}$$

$$-\frac{11}{13} = x$$

7) You could multiply by LCD first, but $4x + 2x$ first seems easiest. 10 LCD

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

$$\frac{3}{10} = 6x - \frac{1}{10}$$

$$3 = 60x - 1$$
$$+1 \quad +1$$

$$\frac{4}{60} = \frac{60x}{60}$$

$$\frac{1}{15} = x$$

8) 16 LCD

$$\frac{3}{8}a = \frac{5}{16}$$

$$\frac{6a}{6} = \frac{5}{6}$$

$$a = \frac{5}{6}$$

9) 15 LCD

$$\frac{4}{5}y = \frac{7}{15} - \frac{y}{15} + \frac{2}{3}$$

$$12y = 7 - 1y + 10$$
$$+1y \quad +1y$$

$$\frac{13y}{13} = \frac{17}{13}$$

$$y = \frac{17}{13} \text{ or } 1\frac{4}{13}$$