

Solve each equations by clearing fractions first

$$1) \frac{3}{4}x + \frac{1}{2} = -\frac{5}{2} \quad \text{LCD: } \underline{4}$$

$$3x + 2 = -10$$

$$3x = -12$$

$$x = -4$$

$$4) x + \frac{2}{3} = \frac{1}{4}x - 1 \quad \text{LCD: } \underline{12}$$

$$12x + 8 = 3x - 12$$

$$9x + 8 = -12$$

$$-8 \quad -8$$

$$9x = -20$$

$$x = \frac{-20}{9}$$

$$2) \frac{1}{4}m - 3 = \frac{1}{2}m + 12 \quad \text{LCD: } \underline{4}$$

$$m - 12 = 2m + 48$$

$$-m \quad -m$$

$$-12 = m + 48$$

$$-48 \quad -48$$

$$-60 = m$$

$$5) \frac{1}{2} + \frac{2}{5}n - 1 = \frac{1}{5}n + n \quad \text{LCD: } \underline{10}$$

$$5 + 4n - 10 = 2n + 10n$$

$$4n - 5 = 12n$$

$$-4n \quad -4n$$

$$-5 = 8n$$

$$\frac{-5}{8} = n$$

$$3) \frac{1}{4}n + n = -3 + \frac{1}{2}n \quad \text{LCD: } \underline{4}$$

$$n + 4n = -12 + 2n$$

$$5n = -12 + 2n$$

$$-2n \quad -2n$$

$$3n = -12$$

$$n = -4$$

$$6) \frac{1}{5}m + \frac{2}{3} - 2 = m - \frac{2}{5} \quad \text{LCD: } \underline{15}$$

$$3m + 10 - 30 = 15m - 6$$

$$3m - 20 = 15m - 6$$

$$-3m \quad -3m$$

$$-20 = 12m - 6$$

$$+6 \quad +6$$

$$-14 = 12m$$

$$\frac{-14}{12} = m$$

$$\frac{-7}{6} = m$$

Name KeyPeriod ABCDEF Date \_\_\_\_\_**Solve each equations by clearing decimals first**

7)  $0.25x + 0.6 = 0.1$  **Power: 100**

$$\begin{aligned} 25x + 60 &= 10 \\ -60 \quad -60 & \\ 25x &= -50 \\ x &= -2 \end{aligned}$$

$x = -2$

\* 10)  $0.3(n - 2) + 0.1 = 0.4$  **Power: 10**

$$\begin{aligned} 3(n - 2) + 1 &= 4 \\ 3n - 6 + 1 &= 4 \\ 3n - 5 &= 4 \\ +5 \quad +5 & \\ 3n &= 9 \\ n &= 3 \end{aligned}$$

$n = 3$

8)  $11.3m + 12.8 = 7.5m + 35.6$  **Power: 10**

$$\begin{aligned} 113m + 128 &= 75m + 356 \\ -75m \quad -75m & \\ 38m + 128 &= 356 \\ -128 \quad -128 & \\ 38m &= 228 \\ \frac{38m}{38} &= \frac{228}{38} \\ m &= 6 \end{aligned}$$

$m = 6$

11)  $0.4x - 1.2 = 0.15x + 0.8$  **Power: 100**

$$\begin{aligned} 40x - 120 &= 15x + 80 \\ -15x \quad -15x & \\ 25x - 120 &= 80 \\ +120 \quad +120 & \\ 25x &= 200 \\ x &= 8 \end{aligned}$$

$x = 8$

9)  $0.15n - 0.1 = 0.25n + 2$  **Power: 100**

$$\begin{aligned} 15n - 10 &= 25n + 200 \\ -15n \quad -15n & \\ -10 &= 10n + 200 \\ -200 \quad -200 & \\ -210 &= 10n \\ -21 &= n \end{aligned}$$

$n = -21$

12)  $0.4(6x + 20) - 4 = 0.25(8x + 20)$

**Power: 100**

$$\begin{aligned} 40(6x + 20) - 400 &= 25(8x + 20) \\ 240x + 800 - 400 &= 200x + 500 \\ 240x + 400 &= 200x + 500 \\ -200x \quad -200x & \\ 40x + 400 &= 500 \\ 40x &= 100 \\ x &= \frac{100}{40} \Rightarrow \frac{10}{4} = \frac{5}{2} \end{aligned}$$

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