

## Ex-7 Solving x /: Equations w/frac. +dec.

$$1) \quad \frac{1}{4}x = 4\frac{1}{8} \quad \text{OR} \quad \left(\frac{4}{1}\right)\frac{1}{4}x = 4\frac{1}{8}\left(\frac{4}{1}\right)$$

$$\frac{1}{4} \quad \frac{1}{4}$$

$$x = \frac{33}{8} \cdot \frac{4}{1}$$

$$x = 4\frac{1}{8} \div \frac{1}{4}$$

$$x = \frac{33}{2}$$

$$x = \frac{33}{8} \cdot \frac{4}{1}$$

$$x = \frac{33}{2}$$

✓

$$\frac{1}{4} \cdot \frac{33}{2} = 4\frac{1}{8}$$

$$\frac{33}{8} = 4\frac{1}{8} \rightarrow 4\frac{1}{8} = 4\frac{1}{8}$$

$$2) \begin{pmatrix} 1 & 1 \\ 1 & 1 \end{pmatrix} X = 4.5 \begin{pmatrix} 1 \\ -1 \end{pmatrix}$$

$$X = -6.75$$

$$\sqrt{\frac{-6.75}{-1.5}} = 4.5$$

$$4.5 = 4.5$$

$$\begin{array}{ccc|c} & & & 4.5 \\ & & & 1. \\ \hline 0 & 4 & 0 & 5 \\ 6 & 2 & 2 & 5 \\ \hline 6 & 7 & 2 & 5 \end{array}$$

$$\begin{array}{r} 0 \quad 4.5 \\ \hline 1.5 \overline{) 6.75} \\ \underline{-6.0} \phantom{0} \\ 75 \\ \underline{-75} \\ 0 \end{array}$$

$$3) \quad \frac{2.3x}{2.3} = \frac{-9.2}{2.3}$$

$$\boxed{x = -4}$$

$$\checkmark 2.3(-4) = -9.2$$

$$-9.2 = -9.2$$

$$\begin{array}{r} 2.3 \overline{) 9.2} \\ \underline{-9.2} \\ 0 \end{array}$$

4)

$$\frac{\cancel{6}^1 \cancel{6}^1 \sqrt{5}}{3} = \frac{\sqrt{5}}{3}$$

$$m = \frac{-2}{3} \div \frac{\sqrt{5}}{6}$$

$$m = \frac{-2}{3} \cdot \frac{6}{\sqrt{5}^2}$$

$$m = \frac{-4}{\sqrt{5}}$$

$$\frac{\cancel{3}^1 \cancel{6}^1 \sqrt{5}}{\cancel{2}^1 \cdot \cancel{2}^1} = \frac{\sqrt{5}}{2}$$

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

OR

$$\frac{\cancel{6}^1 \cancel{6}^1 \sqrt{5}}{3} = \frac{\sqrt{5}}{3}$$

$$m = \frac{-4}{\sqrt{5}}$$

$$\frac{\cancel{3}^1 \cancel{6}^1 \sqrt{5}}{\cancel{2}^1 \cdot \cancel{2}^1} = \frac{\sqrt{5}}{2}$$

$$5) \quad \begin{array}{r} 5.3x = 99.11 \\ \hline 5.3 \quad 5.3 \end{array}$$

$$x = 18.7$$

$$\begin{aligned} \checkmark \quad 5.3(18.7) &= 99.11 \\ 99.11 &= 99.11 \end{aligned}$$

$$\begin{array}{r} 2 \quad 2 \quad 018.7 \\ 5.3 \overline{) 99.11} \\ \underline{-53} \quad \downarrow \\ 461 \\ \underline{424} \quad \downarrow \\ 371 \\ \underline{-371} \\ 0 \end{array}$$

$$\begin{array}{r} 18.7 \\ \hline 09543055. \\ 90324213 \\ 9 \quad 1 \quad 1 \end{array}$$