

# 08.2021 SIMPLE (Linear) Equation

Ex-22(A)

Solve

$$i) x + 2 = 6$$

$$\Rightarrow x + 2 - 2 = 6 - 2$$

$$\Rightarrow x = 4$$

$$ii) x + 6 = 2$$

$$\Rightarrow x + 6 - 6 = 2 - 6$$

$$\Rightarrow x = -4$$

$$iii) y + 8 = 5$$

$$\Rightarrow y + 8 - 8 = 5 - 8$$

$$\Rightarrow y = -3$$

$$iv) x + 4 = -3$$

$$\Rightarrow x + 4 - 4 = -3 - 4$$

$$\Rightarrow x + 4 - 4 = -3 - 4$$

$$\Rightarrow x = -7$$

$$v) y + 2 = 48$$

$$\Rightarrow y = 48 - 2$$

$$\Rightarrow y = 46$$

$$vi) b + 2.5 = 42$$

$$\Rightarrow b = 42 - 2.5$$

$$\Rightarrow b = 39.5$$

$$vii) p + 4.6 = 8.5$$

$$\Rightarrow p = 8.5 - 4.6$$

$$\Rightarrow p = 3.9$$

$$viii) y + 3.2 = -6.5$$

$$\Rightarrow y = -6.5 - 3.2$$

$$\Rightarrow y = -9.7$$

$$ix) a + 8.9 = -12.6$$

$$\Rightarrow a = -12.6 - 8.9$$

$$\Rightarrow a = -21.5$$

$$x) x + 2\frac{1}{3} = 5$$

$$\Rightarrow x + \frac{7}{3} - \frac{7}{3} = 5 - \frac{7}{3}$$

$$\Rightarrow x = \frac{8}{3}$$

$$\frac{8}{3} = 2\frac{2}{3}$$

$$xi) z + 2 = 4\frac{1}{5}$$

$$xii) m + 3\frac{1}{2} = 4\frac{1}{4}$$

$$\Rightarrow z + \cancel{2} - \cancel{2} = 4\frac{1}{5} - 2$$

$$\Rightarrow m + \cancel{3\frac{1}{2}} - \cancel{3\frac{1}{2}} = 4\frac{1}{4} - 3\frac{1}{2}$$

$$\Rightarrow z = \frac{21}{5} - 2$$

$$\Rightarrow m = \frac{17}{4} - \frac{7}{2}$$

$$\Rightarrow \frac{11}{5} = 2\frac{1}{5}$$

$$= \frac{3}{4}$$

$$xiii) x + 2 = 1\frac{1}{4}$$

$$xiv) y + 5\frac{1}{3} = 4$$

$$\Rightarrow x + \cancel{2} - \cancel{2} = 1\frac{1}{4} - 2$$

$$\Rightarrow y + \cancel{5\frac{1}{3}} - \cancel{5\frac{1}{3}} = 4 - 5\frac{1}{3}$$

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

$$\Rightarrow y = 4 - \frac{16}{3}$$

$$\Rightarrow -\frac{3}{4}$$

$$\Rightarrow -\frac{4}{3} = -1\frac{1}{3}$$

$$xv) a + 3\frac{1}{5} = 1\frac{1}{2}$$

$$\Rightarrow a + \cancel{3\frac{1}{5}} - \cancel{3\frac{1}{5}} = 1\frac{1}{2} - 3\frac{1}{5}$$

$$\Rightarrow a = \frac{3}{2} - \frac{16}{5}$$

$$\Rightarrow \frac{15 - 32}{10}$$

$$\Rightarrow -\frac{17}{10} = -1\frac{7}{10}$$

Solusi

$$\begin{aligned}x - 3 &= 2 \\x - 3 + 3 &= 2 + 3 \\x &= 2 + 3 \\x &= 5\end{aligned}$$

$$\begin{aligned}\text{iii) } m - 2 &= -5 \\m - 2 + 2 &= -5 + 2 \\m &= -3\end{aligned}$$

$$\begin{aligned}b - 5 &= 7 \\b - 5 + 5 &= 7 + 5 \\b &= 12\end{aligned}$$

$$\begin{aligned}\text{iv) } a - 2.5 &= -4 \\a - 2.5 + 2.5 &= -4 + 2.5 \\a &= -1.5\end{aligned}$$

$$y - 3\frac{1}{2} = 6$$

$$y - 3\frac{1}{2} + 3\frac{1}{2} = 6 + 3\frac{1}{2}$$

$$y = 6 + \frac{7}{2}$$

$$\frac{12 + 7}{2}$$

$$\frac{19}{2} = 9\frac{1}{2}$$

$$\text{i) } z - 2\frac{1}{3} = -6$$

$$z - 2\frac{1}{3} + 2\frac{1}{3} = -6 + 2\frac{1}{3}$$

$$z = -6 + \frac{7}{3}$$

$$\frac{-18 + 7}{3}$$

$$\frac{-11}{3} = 3\frac{2}{3}$$

$$p - 5.4 = 2.7$$

$$p - 5.4 + 5.4 = 2.7 + 5.4$$

$$p = 2.7 + 5.4$$

$$8.1$$

$$x - 1.5 = -4.9$$

$$x - 1.5 + 1.5 = -4.9 + 1.5$$

$$x = -4.9 + 1.5$$

$$-3.4$$

$$n - 4 = -4\frac{1}{5}$$

$$n - 4 + 4 = -4\frac{1}{5} + 4$$

$$n = -4\frac{1}{5} + 4$$

$$n = -\frac{21}{5} + 4$$

$$-\frac{1}{5}$$

Solve

$$3x = 12$$

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

$$x = 4$$

$$\text{ii) } 2y = 9$$

$$\frac{2y}{2} = \frac{9}{2}$$

$$\Rightarrow y = \frac{9}{2}$$

$$\text{iii) } 5z = 8.5$$

$$\Rightarrow \frac{5z}{5} = \frac{8.5}{5}$$

$$\Rightarrow z = \frac{8.5}{5}$$

$$= 1.7$$

$$1.7$$

$$a - 2.5 = -4$$

$$a - 2.5 + 2.5 = -4 + 2.5$$

$$a = -4 + 2.5$$

$$a = -1.5$$

$$-1.5$$

$$\Rightarrow \frac{1.7}{10}$$

$$= 1.7$$

$$2.5m = 7.5$$

$$\frac{2.5m}{2.5} = \frac{7.5}{2.5}$$

$$m = 3$$

$$v) 3.2p = 16$$

$$\Rightarrow \frac{3.2p}{3.2} = \frac{16}{3.2}$$

$$\Rightarrow p = 5$$

$$2a = 4.6$$

$$\frac{2a}{2} = \frac{4.6}{2}$$

$$a = 2.3$$

Solve

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

$$ii) \frac{y}{3} = -2$$

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

$$\Rightarrow \frac{y}{3} \times 3 = -2 \times 3$$

$$x = 10$$

$$\Rightarrow y = -6$$

$$i) \frac{a}{5} = -15$$

$$iii) \frac{z}{4} = 13\frac{1}{4}$$

$$\frac{a}{5} \times 5 = -15 \times 5$$

$$\Rightarrow \frac{z}{4} \times 4 = 13\frac{1}{4} \times 4$$

$$a = -75$$

$$\Rightarrow z = 13$$

$$\frac{m}{6} = 2\frac{1}{2}$$

$$vi) \frac{n}{7} = -2.8$$

$$\frac{m}{6} \times 6 = 2\frac{1}{2} \times 6$$

$$\Rightarrow \frac{n}{7} \times 7 = -2.8 \times 7$$

$$m = 15$$

$$\Rightarrow n = -19.6$$

5. Solve

$$i) -2x = 8$$

$$\Rightarrow \frac{-2x}{-2} = \frac{8}{-2}$$

$$\Rightarrow x = -4$$

$$ii) -3.5y = 14$$

$$\Rightarrow \frac{-3.5y}{-3.5} = \frac{14}{-3.5}$$

$$\Rightarrow y = -4$$

$$iii) -5z = 4$$

$$\Rightarrow \frac{-5z}{-5} = \frac{4}{-5}$$

$$\Rightarrow z = \frac{4}{-5} = -0.8$$

$$iv) -5 = a + 3$$

$$\Rightarrow a + 3 = -5$$

$$\Rightarrow a + \cancel{3} - \cancel{3} = -5 - 3$$

$$\Rightarrow a = -8$$

$$v) 2 = p + 5$$

$$\Rightarrow p + 5 = 2$$

$$\Rightarrow p + \cancel{5} - \cancel{5} = 2 - 5$$

$$\Rightarrow p = -3$$

$$vi) 4.5 = m - 2.7$$

$$\Rightarrow m - 2.7 = 4.5$$

$$\Rightarrow m - \cancel{2.7} + \cancel{2.7} = 4.5 + 2.7$$

$$\Rightarrow m = 7.2$$

$$vii) 3\frac{2}{5} = x - 2\frac{1}{3}$$

$$\Rightarrow x - 2\frac{1}{3} = 3\frac{2}{5}$$

$$\Rightarrow x - \frac{7}{3} = \frac{17}{5}$$

$$\Rightarrow x - \frac{7}{3} + \frac{7}{3} = \frac{17}{5} + \frac{7}{3}$$

$$\Rightarrow x = \frac{51}{15} + \frac{35}{15}$$

$$\Rightarrow \frac{86}{15} = \frac{11}{15}$$

$$\Rightarrow x = 5\frac{11}{15}$$

$$viii) 5 = m + 3\frac{4}{7}$$

$$\Rightarrow m + 3\frac{4}{7} = 5$$

$$\Rightarrow m + \frac{25}{7} - \frac{25}{7} = 5 - \frac{25}{7}$$

$$\Rightarrow m = \frac{35}{7} - \frac{25}{7}$$

$$\Rightarrow \frac{10}{7} = \frac{10}{7}$$

$$m = 1\frac{3}{7}$$

$$\text{ex) } -2\frac{1}{5} = y - 4$$

$$\Rightarrow y - 4 = -\frac{11}{5}$$

$$\Rightarrow y - \cancel{4} + \cancel{4} = -\frac{11}{5} + 4$$

$$\Rightarrow y = \frac{-11 + 20}{5}$$

$$\Rightarrow \frac{9}{5} = 1\frac{4}{5}$$