

Ex-22 A

1. Solve

i) $x+2=6$

$$x = 6 - 2$$

$$x = 4$$

ii) $x+6=2$

$$x = -4$$

iii) $y+8=5$

$$y = -3$$

iv) $x+4=-3$

$$x = -7$$

v) $y+2=-8$

$$y = -10$$

vi) $b+2.5 = 4.2$

$$b = 1.7$$

vii) $p+4.6 = 8.5$

$$p = 3.9$$

viii) $y+3.2 = -6.5$

$$y = 9.7$$

ix) $a+8.9 = -12.6$

$$a = -21.5$$

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

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

$$x = \frac{7}{3} - \frac{5}{1}$$

$$= 2 = \frac{21}{5} - \frac{2}{1}$$

$$x = \frac{15-7}{3} = \frac{8}{3} \quad 2 = \frac{21-10}{5} = \frac{11}{5}$$

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

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

$$= m + \frac{7}{2} = \frac{17}{4}$$

$$= x + 2 = \frac{5}{4}$$

$$= m + \frac{17}{4} - \frac{14}{4}$$

$$= x = \frac{5-8}{4}$$

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

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

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

$$= y + \frac{16}{3} = 4$$

$$= y = \frac{12-16}{3} = \frac{-4}{3}$$

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

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

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

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

$$= a = \frac{15 - 32}{5} = a = \frac{-17}{5}$$

$$= a = -\frac{17}{5}$$

$$2i) x - 3 = 2$$

$$= x = 2 + 3$$

$$= x = 5$$

$$ii) m - 2 = -5$$

$$= m = -5 + 2$$

$$= m = -3$$

$$iii) b - 5 = 7$$

$$= b = 7 + 5$$

$$= b = 12$$

$$iv) a - 2.5 = -4$$

$$= a = -4 + 2.5$$

$$= a = -1.5$$

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

$$= y - 7 = 6$$

$$= y = 6 + 7$$

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

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

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

$$= z - 7\frac{1}{3} = -6$$

$$= z = -6 + 7\frac{1}{3}$$

$$= z = -18 + 7$$

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

$$vii) p - 5.4 = 2.7$$

$$= p = 2.7 + 5.4$$

$$= p = 8.1$$

$$viii) x - 1.5 = -4.9$$

$$= x = -4.9 + 1.5$$

$$= x = -3.4$$

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

$$= n - 4 = -2\frac{1}{5}$$

$$= n = -2\frac{1}{5} + 4$$

$$= n = -2\frac{1}{5} + 20$$

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

$$5$$

3i) $3x = 12$ ii) $2y = 9$ iii) $5z = 8.5$
 $= x = \frac{12}{3}$ $= y = \frac{9}{2}$ $= z = \frac{8.5}{5}$
 $= x = 4$ $= y = 4\frac{1}{2}$ $= z = 1.7$

iv) $2.5m = 7.5$ v) $32p = 16$ vi) $2a = 4.6$
 $= m = \frac{7.5}{2.5}$ $= p = \frac{16}{32}$ $= a = \frac{4.6}{2}$
 $= m = \frac{75}{25}$ $= p = \frac{16 \times 10}{32}$ $= a = 2.3$
 $= m = 3$ $= p = 5$

4i) $\frac{x}{2} = 5$ ii) $\frac{y}{3} = -2$ iii) $\frac{g}{5} = -15$
 $= x = 5 \times 2$ $= y = -2 \times 3$ $= a = -15 \times 5$
 $= x = 10$ $= y = -6$ $= -75$

iv) $\frac{z}{4} = 3\frac{1}{4}$ v) $\frac{m}{6} = 2\frac{1}{2}$ vi) $\frac{n}{7} = -2.8$
 $= z = \frac{13}{4}$ $= m = \frac{5}{2}$ $= n = -2.8 \times 7$
 $= z = \frac{13}{4} \times 4$ $= m = \frac{5}{2} \times 6$ $= n = -19.6$
 $= z = 13$ $= m = 15$

5i) $-2x = 8$ ii) $-3.5y = 14$ iii) $-5z = 4$
 $= x = \frac{8}{-2}$ $= y = \frac{14}{-3.5}$ $= z = \frac{4}{-5}$
 $= x = -4$ $= y = -4$ $= z = -0.8$
 $= y = \frac{-14 \times 10}{35}$
 ~~$= y = -4$~~
 $= y = -4$

$$\begin{array}{lll}
 \text{iv)} & -5 = a + 3 & \text{v)} \quad 2 = p + 5 \\
 & = a + 3 = -5 & = p + 5 = 2 \\
 & = a = -5 - 3 & = p = 2 - 5 \\
 & = a = -8 & = p = -3
 \end{array}
 \quad \text{vi)} \quad 4 \cdot 5 = m - 2 \cdot 7$$

$$\begin{array}{l}
 = m - 2 \cdot 7 = 4 \cdot 5 \\
 = m = 4 \cdot 5 + 2 \cdot 7 \\
 = m = 7 \cdot 2
 \end{array}$$

$$\text{vii)} \quad 3\frac{2}{5} = x - 2\frac{1}{3} \quad \text{viii)} \quad 5 = m + 3\frac{4}{7}$$

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

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

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

$$= \frac{35 + 51}{15} = \frac{86}{15}$$

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

$$\begin{array}{l}
 = 5 = m + \frac{28}{7} \\
 = m + \frac{28}{7} = 5
 \end{array}$$

$$= m = 5 - \frac{28}{7}$$

$$= m = \frac{35 - 28}{7}$$

$$= m = \frac{10}{7} = 1\frac{3}{7}$$

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

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

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

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

$$= \frac{9}{5} \quad y = 1\frac{4}{5}$$