

Ex-22.0

Q1: ans i) $x+2=6$

$\Rightarrow x=6-2$

$\Rightarrow x=4$

ans ii) $x+6=2$

$\Rightarrow x=2-6$

$\Rightarrow x=-4$

ans iii) $y+8=5$

$\Rightarrow y=5-8$

$\Rightarrow y=-3$

ans iv) $x+4=-3$

$\Rightarrow x=-3-4$

$\Rightarrow x=-7$

ans v) $y+2=-8$

$\Rightarrow y=-8-2$

$\Rightarrow y=-10$

ans vi) $b+2.5=4.2$

$\Rightarrow b=4.2-2.5$

$\Rightarrow b=1.7$

ans vii) $p+4.6=8.5$

$\Rightarrow p=8.5-4.6$

$\Rightarrow p=3.9$

ans viii) $q+3.2=-6.5$

$\Rightarrow q=6.5-3.2-6.5-3.2$

$\Rightarrow q=-9.7$

ans ix) $a+8.9=-12.6$

$\Rightarrow a=-12.6-8.9$

$\Rightarrow a=-21.5$

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

~~$x=5-\frac{11}{3}$~~

~~$x=5 \times 3 - 11 = \frac{15}{3} - 11$~~

~~ans i)~~
~~ans ii)~~

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

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

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

$\Rightarrow x=5 \times 3 - 7 = \frac{15-7}{3}$

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

$\Rightarrow x=2\frac{2}{3}$

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

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

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

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

$\Rightarrow z=\frac{21-10}{5}$

$\Rightarrow z=\frac{9 \times 19}{81} \frac{11}{5}$

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

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

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

$$\Rightarrow m = \frac{17}{4} - \frac{7}{2} \Rightarrow y = -1\frac{1}{3}$$

$$\Rightarrow m = \frac{17}{4} - 7 \times \frac{1}{2} \quad \text{ans xv) } a + 3\frac{1}{5} = 1\frac{1}{2}$$

$$\Rightarrow m = \frac{17}{4} - 14 \Rightarrow a = 1\frac{1}{2} - 3\frac{1}{5}$$

$$\Rightarrow m = \frac{3}{4} \Rightarrow a = \frac{3}{2} - 1\frac{6}{5}$$

$$\text{ans xiii) } x + 2 = 1\frac{1}{4} \Rightarrow a = \frac{3 \times 5 - 2 \times 16}{10}$$

$$\Rightarrow x = 1\frac{1}{4} - 2 \Rightarrow a = \frac{15 - 32}{10}$$

$$\Rightarrow x = \frac{5}{4} - 2 \Rightarrow a = \frac{17}{10}$$

$$\Rightarrow x = \frac{5 - 2 \times 4}{4} \Rightarrow a = 1\frac{7}{10}$$

$$\Rightarrow x = \frac{5 - 8}{4} \quad \text{Q2: ans i) } x - 3 = 2$$

$$\Rightarrow x = 2 + 3$$

$$\Rightarrow x = -\frac{3}{4} \Rightarrow x = 5$$

$$\text{ans ii) } m - 2 = -5$$

$$\Rightarrow m = -5 + 2$$

$$\Rightarrow m = -3$$

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

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

$$\text{ans iii) } b - 5 = 7$$

$$\Rightarrow b = 7 + 5$$

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

$$\Rightarrow b = 12$$

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

$$\text{ans iv) } a - 2 \cdot 5 = -4$$

$$\Rightarrow a = 4 + 2 \cdot 5$$

$$\Rightarrow a = 6 \cdot 5$$

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

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

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

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

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

$$\Rightarrow x = 6 - 3.4$$

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

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

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

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

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

$$\Rightarrow y = \frac{19}{2}$$

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

$$\Rightarrow y = \frac{91}{2}$$

$$\Rightarrow n = -\frac{21 + 20}{5}$$

$$\text{ans vi) } z - \frac{21}{3} = -6$$

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

$$\Rightarrow z = -6 + \frac{21}{3}$$

$$\Rightarrow n = -0.2$$

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

$$\text{Q3: ans i) } 3x = 12$$

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

$$\Rightarrow x = 12 \div 3$$

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

$$\Rightarrow z = \frac{-18 + 7}{3}$$

$$\Rightarrow x = 4$$

$$\Rightarrow z = \frac{28}{3} - \frac{11}{3}$$

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

$$\Rightarrow y = 9 \div 2$$

$$\Rightarrow z = -\frac{32}{3}$$

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

$$\text{ans vij) } p - 5.4 = 2.7$$

$$\Rightarrow y = 4 \frac{1}{2} = 4.5$$

$$\Rightarrow p = 2.7 + 5.4$$

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

$$\Rightarrow z = 8.5 \div 5 = \frac{85}{10} \times \frac{1}{5}$$

$$\Rightarrow p = 8.1$$

$$\Rightarrow z = \frac{8.5}{5} = 1.7$$

$$\text{ans viii) } x - 1.5 = -4.9$$

$$\frac{1}{2} + 7 = y \Rightarrow z = 1.7$$

$$\Rightarrow x = -4.9 + 1.5$$

ans iv) $2.5m = 7.5$

$\Rightarrow m = 7.5 \div 2.5$

$\Rightarrow m = \frac{7.5}{2.5} = 3$

$\Rightarrow m = 3$

ans v) $3 \cdot 2p = 16$

$\Rightarrow p = \frac{16}{3 \cdot 2} = \frac{16}{6}$

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

$\Rightarrow p = 2$

ans vi) $2a = 4.6$

$\Rightarrow a = 4.6 \div 2$

$\Rightarrow a = \frac{4.6}{2} = 2.3$

$\Rightarrow a = 2.3$

Q4. ans i) $\frac{x}{2} = 5$

$\Rightarrow x = 5 \times 2$

$\Rightarrow x = 10$

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

$\Rightarrow y = -2 \times 3$

$\Rightarrow y = -6$

ans iii) $\frac{a}{5} = -15$

$\Rightarrow a = -15 \times 5$

$\Rightarrow a = -75$

ans iv) $\frac{z}{4} = 3 \frac{1}{4}$

$\Rightarrow z = 3 \frac{1}{4} \times 4$

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

$\Rightarrow z = 13$

ans v) $\frac{m}{6} = 2 \frac{1}{2}$

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

$\Rightarrow m = \frac{5}{2} \times \frac{6}{1}$

$\Rightarrow m = \frac{30}{2} = 15$

$\Rightarrow m = 15$

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

$\Rightarrow n = -2.8 \times 7$

$\Rightarrow n = -19.6$

ans vii) $-2x = 8$

$\Rightarrow x = \frac{8}{-2} = -4$

$\Rightarrow x = -4$

ans ii) $-3.5y = 14$

$\Rightarrow y = \frac{14}{-3.5} = \frac{14 \times 10}{-35} = -4$

$\Rightarrow y = \frac{14}{-3.5} = \frac{14 \times 10}{-35} = -4$

$\Rightarrow y = \frac{14 \times 10}{-35} = -4$

$\Rightarrow y = \frac{14 \times 10}{-35} = -4$

$\Rightarrow y = 4$

ans viii) $5m + 34$
 $\frac{7}{7}$

ans iii) $-5z = 4$

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

$z = 5 \overline{) 40}$
 $\underline{-40}$
 $\hline 0$

$z = 0.8$

$\Rightarrow \frac{5 - 34}{7} = m$

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

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

ans iv) $-5 = at + 3$

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

$\Rightarrow a = 8 - 8 = 0$

$\Rightarrow a = 8$

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

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

ans v) $2 = pt + 5$

$\Rightarrow 2 - 5 = p$

$\Rightarrow -3 = p$

$\Rightarrow p = -3$

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

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

ans vi) $4.5 = m - 2.7$

$\Rightarrow 4.5 + 2.7 = m$

$\Rightarrow 7.2 = m$

$\Rightarrow m = 7.2$

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

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

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

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

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

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

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

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

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

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

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

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

~~$\frac{9}{5} = y$~~ $\frac{9}{5} = y$

$\frac{9}{5} = y$

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