

C10  
17/8/21

Ex-22(A)

i)  $x - 3 = 2$

$$\Rightarrow x - 3 + 3 = 2 + 3$$

$$\Rightarrow x = 5$$

ii)  $m - 2 = -5$

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

$$\Rightarrow m = -3$$

iii)  $b - 5 = 7$

$$\Rightarrow b - 5 + 5 = 7 + 5$$

$$\Rightarrow b = 12$$

iv)  $a - 2.5 = -4$

$$\Rightarrow a - 2.5 + 2.5 = -4 + 2.5$$

$$\Rightarrow a = -1.5$$

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

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

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

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

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

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

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

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

vii)  $p - 5.4 = 2.7$

$$\Rightarrow p - 5.4 + 5.4 = 2.7 + 5.4$$

$$\Rightarrow p = 8.1$$

viii)  $x - 1.5 = -4.9$

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

$$\Rightarrow x = -3.4$$

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

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

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

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

5) i)  $3x = 12$

ii)  $2y = 9$

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

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

$\Rightarrow x = 4$

$\Rightarrow y = \frac{9}{2} = 4\frac{1}{2}$

iii)  $5z = 8.5$

iv)  $2.5m = 7.5$

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

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

$\Rightarrow z = 1.7$

$\Rightarrow m = 3$

v)  $3.2p = 16$

vi)  $2a = 4.6$

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

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

$\Rightarrow p = \frac{16 \times 10}{3.2 \times 10}$

$\Rightarrow a = 2.3$

$\Rightarrow p = \frac{160}{32}$

$\Rightarrow p = 5$

$$4) i) \frac{x}{2} = 5$$

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

$$\Rightarrow x = 10$$

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

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

$$\Rightarrow n = 19.4$$

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

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

$$\Rightarrow y = -6$$

$$5i) -2x = 8$$

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

$$\Rightarrow x = -4$$

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

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

$$\Rightarrow a = -75$$

$$ii) -3.5y = 14$$

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

$$\Rightarrow y = \frac{14 \times 10}{-3.5 \times 10} = \frac{140}{-35} = -4$$

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

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

$$\Rightarrow z = 13$$

$$iii) -5z = 4$$

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

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

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

$$\Rightarrow m = \frac{15}{1} = 15$$

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

iv)  $-5 = a + 3$

$\frac{1}{2}x + m = 2$  (iii)

~~$-5 + 5 = a + 3 - 5$~~

$\frac{2x - 2}{2} = \frac{2x - 2}{2} + m$  ←

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

$\Rightarrow a = -8$  ←

v)  $2 = p + 5$

$p - p = \frac{1}{2}x -$  (vi)

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

$x + p - p = x + \frac{11}{2}$  ←

$\Rightarrow p = -3$

$\frac{p}{2} = \frac{11 - 0.5}{2} = \frac{11 + (2 \times p)}{2}$  ←

vi)  $4.5 = m - 2.7$

$\Rightarrow m - 2.7 + 2.7 = 4.5 + 2.7$

$\Rightarrow m = 7.2$

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

$\Rightarrow x - 2\frac{7}{3} + \frac{7}{3} = \frac{17}{5} + \frac{7}{3}$

$\Rightarrow x = \frac{(17 \times 3) + (7 \times 5)}{15} = \frac{51 + 35}{15} = \frac{86}{15}$

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

$$\text{iii)} \quad 5 = m + 3\frac{4}{7}$$

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

$$\Rightarrow m = \frac{(5 \times 7) - 25}{7} = \frac{35 - 25}{7} = \frac{10}{7} = 1\frac{3}{7}$$

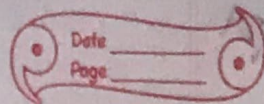
$$\text{iv)} \quad -2\frac{1}{5} = y - 4$$

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

$$\Rightarrow y = \frac{(4 \times 5) + 11}{5} = \frac{20 + 11}{5} = \frac{9}{5}$$

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(8) 25 - x^2



$$\Rightarrow x - 2 = -4$$

$$\Rightarrow x = -4 + 2$$

$$\Rightarrow x = -2 = \text{Ans}$$

$$3z - 1 = 8$$

$$\Rightarrow 3z = 8 + 1$$

$$\Rightarrow \frac{3z}{3} = \frac{9}{3}$$

$$\Rightarrow z = 3$$

$$\Rightarrow 3x - 4 = 17 \Rightarrow 3x - 4 + 4 = 17 + 4$$

$$\Rightarrow 3x = 17 + 4$$

$$\Rightarrow 3x = 21 \Rightarrow 3x = 21$$

$$\Rightarrow x = \frac{21}{3} \Rightarrow x = \frac{21}{3}$$

$$\Rightarrow x = 7 \Rightarrow x = 7$$