

Class = VI

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Chapter = 22

SIMPLE (LINER) EQUATIONS

Section = B

Date

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HOMEWORK - 22(A)

1. Solve

$$\begin{aligned} \text{(i)} \quad x + 2 &= 6 \\ &= x = 6 - 2 \\ &= x = 4 \end{aligned}$$

$$\begin{aligned} \text{(viii)} \quad y + 3 \cdot 2 &= -6 \cdot 5 \\ &= y = -6 \cdot 5 - 3 \cdot 2 \\ &= y = -9 \cdot 7 \end{aligned}$$

$$\begin{aligned} \text{(ii)} \quad x + 6 &= 2 \\ &= x = 2 - 6 \\ &= x = -4 \end{aligned}$$

$$\begin{aligned} \text{(ix)} \quad a + 8 \cdot 9 &= -12 \cdot 6 \\ &= a = -12 \cdot 6 - 8 \cdot 9 \\ &= a = -21 \cdot 5 \end{aligned}$$

$$\begin{aligned} \text{(iii)} \quad y + 8 &= 5 \\ &= y = 5 - 8 \\ &= y = -3 \end{aligned}$$

$$\begin{aligned} \text{(x)} \quad x + 2 \frac{1}{3} &= 5 \\ &= x + \frac{7}{3} = 5 \\ &= x = 5 - \frac{7}{3} = \frac{15 - 7}{3} = \frac{8}{3} \\ &= x = 2 \frac{2}{3} \end{aligned}$$

$$\begin{aligned} \text{(iv)} \quad x + 4 &= -3 \\ y &= 5 - 8 \\ y &= -3 \end{aligned}$$

$$\begin{aligned} \text{(xi)} \quad z + 2 &= 4 \frac{1}{5} \\ &= z + 2 = \frac{21}{5} \\ &= z = \frac{21}{5} - 2 = \frac{21 - 10}{5} \\ &= z = 2 \frac{1}{5} \end{aligned}$$

$$\begin{aligned} \text{(v)} \quad y + 2 &= -8 \\ &= x = -3 - 4 \\ &= x = -7 \end{aligned}$$

$$\begin{aligned} \text{(xii)} \quad x + 2 &= 1 \frac{1}{4} \\ &= \frac{m + 7}{2} = \frac{17}{4} \end{aligned}$$

$$\begin{aligned} \text{(vi)} \quad b + 2 \cdot 5 &= 4 \cdot 2 \\ &= b = 4 \cdot 2 - 2 \cdot 5 \\ &= b = 1 \cdot 7 \end{aligned}$$

$$\begin{aligned} &= x + 2 = \frac{5}{4} \\ &= x = \frac{5}{4} - 2 = \frac{5 - 8}{4} \\ &= x = -\frac{3}{4} \end{aligned}$$

$$\begin{aligned} \text{(vii)} \quad p + 4 \cdot 6 &= 8 \cdot 5 \\ &= p + 8 \cdot 5 - 4 \cdot 6 \\ &= p = 3 \cdot 9 \end{aligned}$$

$$\begin{aligned} \text{(xiv)} \quad y + 5 \frac{1}{3} &= 4 \\ &= y + \frac{16}{3} = 4 \\ &= y = 4 - \frac{16}{3} = \frac{12 - 16}{3} = -\frac{4}{3} \\ &= a = -1 \frac{1}{3} \end{aligned}$$

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

$$a + \frac{16}{5} = \frac{3}{2}$$

$$a = \frac{3}{2} - \frac{16}{5} = \frac{15 - 32}{10} = \frac{-17}{10}$$

$$a = -1\frac{7}{10}$$

(2) Solve

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

$$x = 2 + 3$$

$$x = 5$$

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

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

$$z = -6 + \frac{7}{3} = \frac{-18 + 7}{3} = \frac{-11}{3}$$

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

$$m = -5 + 2$$

$$m = -3$$

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

$$(iii) b - 5 = 7$$

$$b = 7 + 5$$

$$b = 12$$

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

$$x = -4.9 + 1.5$$

$$x = -3.4$$

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

$$a = -4 + 2.5$$

$$a = 1.5$$

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

$$n = \frac{-21}{5} + 4 = \frac{-21 + 20}{5} = \frac{-1}{5}$$

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

~~$y - 3 = 6$~~

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

$$y = 6 + \frac{7}{2} = \frac{12 + 7}{2} = \frac{19}{2}$$

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

(3) Solve

(i) $3x = 12$
 $x = 12 \div 3 = 4$

(iv) $\frac{z}{4} = 3\frac{1}{4}$
 $\frac{z}{4} = \frac{13}{4}$
 $z = \frac{13}{4} \times 4$

(ii) $2y = 9$
 $y = \frac{9}{2} = 4\frac{1}{2}$

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

(iii) $5z = 8.5$
 $z = 8.5 \div 5 = 1.7$

$m = \frac{5}{2} \times 6 = 5 \times 3 = 15$

(iv) $2.5m = 7.5$
 $m = 7.5 \div 2.5 = 3$

(vi) $\frac{n}{7} = -2.8$
 $n = -2.8 \times 7 = -19.6$

(v) $3.2p = 16$
 $p = 16 \div 3.2 = \frac{16 \times 10}{32} = 5$

(vi) $2a = 4.6$
 $a = 4.6 \div 2 = 2.3$

(4) Solve

(i) $\frac{x}{2} = 5$
 $x = 5 \times 2$
 $x = 10$

(ii) $\frac{y}{3} = -2$
 $y = -2 \times 3 = -6$

(iii) $\frac{a}{5} = -15$
 $a = -15 \times 5 = -75$

(i) $-2x = 8$
 $x = \frac{8}{-2} = -4$

(ii) $-3.5y = 14$
 $y = \frac{14}{-3.5}$
 $x = \frac{-14 \times 10}{35} = -2 \times 2 = -4$

(iii) $-5z = 4$
 $z = \frac{4}{-5} = -0.8$

(iv) $-5 = a + 3$
 $a = -5 - 3 = -8$

(v) $2 = p + 5$
 $p = 2 - 5 = -3$

(vi) $4.5 = m - 2.7$
 $m = 4.5 + 2.7 = 7.2$

(vii) $3\frac{2}{5} = x - 2\frac{1}{3}$
 $\frac{17}{5} = x - \frac{7}{3}$
 $x = \frac{51 + 35}{15} = \frac{86}{15} = 5\frac{11}{15}$

(ix) $-2\frac{1}{3} = y - 4$
 $-\frac{11}{3} = y - 4$
 $y = \frac{-11}{3} + 4 = \frac{-11 + 12}{3} = \frac{1}{3} = 1\frac{1}{3}$