

Ex 1A

1) $\frac{-64}{112}$ HCF of 64 & 112 = 16

$$= \frac{-64 \div 16}{112 \div 16} = \frac{-4}{7}$$

3) i) $\frac{-14}{49}$ HCF of 14 & 49 = 7

$$= \frac{-14 \div 7}{49 \div 7} = \frac{-2}{9}$$

iv) $\frac{-36}{-63} = \frac{-36 \times (-1)}{-63 \times (-1)} = \frac{36}{63}$

$$\frac{36 \div 9}{63 \div 9} = \frac{4}{7}$$

4) ii) $\frac{-5}{12}$ and $\frac{-3}{4}$

LCM of 12, 4 = 12

$$\frac{-5 \times 1}{12 \times 1} = \frac{-5}{12}$$

$$\frac{-3 \times 3}{4 \times 3} = \frac{-9}{12}$$

$$\frac{-5}{12} > \frac{-9}{12}$$

$$\frac{-5}{12} > \frac{-3}{4}$$

5. (iii) $-2, \frac{1}{3}, -\frac{13}{6}$ and $\frac{8}{-3}$

Standard form of $\frac{8}{-3} = \frac{8 \times (-1)}{-3 \times (-1)} = \frac{-8}{3}$

LCM of the denominators = 6

$$-\frac{2 \times 6}{1 \times 6} = \frac{-12}{6}$$

$$\frac{1 \times 2}{3 \times 2} = \frac{2}{6}$$

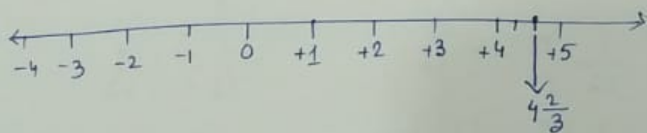
$$\frac{-13 \times 1}{6 \times 1} = \frac{-13}{6}$$

$$\frac{-8 \times 2}{3 \times 2} = \frac{-16}{6}$$

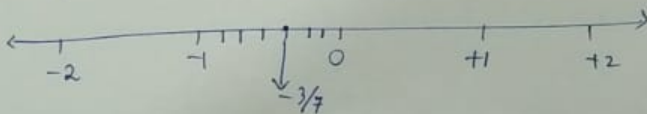
$$-\frac{16}{6} < -\frac{13}{6} < -\frac{12}{6} < \frac{2}{6}$$

$$-\frac{8}{3} < -\frac{13}{6} < -2 < \frac{1}{3}$$

6. (ii) $\frac{14}{3} = 2 \frac{14}{3} = 4 \frac{2}{3}$



(iii) $-\frac{3}{7}$



Ex 1B

1. v) Additive inverse of $-\frac{22}{15} = +\frac{22}{15}$

2. vi) $\frac{4}{7} + \frac{2}{-3} + \frac{5}{21} + \frac{-8}{9}$

$$= \frac{4}{7} + \frac{-2}{3} + \frac{5}{21} + \frac{-8}{9}$$

$$= \frac{36 - 42 + 15 - 56}{63}$$

$$= \frac{-47}{63}$$

$$\begin{array}{l} 3 \overline{) 7, 3, 21, 9} \\ 7 \overline{) 7, 1, 7, 3} \\ \quad 1, 1, 1, 3 \end{array}$$

LCM = 63

3. iv) $-\frac{11}{6}$ from $\frac{8}{3}$

$$= \frac{8}{3} - \frac{-11}{6}$$

$$= \frac{8}{3} + \frac{11}{6}$$

$$= \frac{16 + 11}{6} = \frac{27}{6} \begin{array}{l} 27 \overline{) 4} \\ \underline{-24} \\ 3 \end{array} = 4 \frac{3}{6} = 4 \frac{1}{2}$$

7. The required no. is $= \frac{5}{7} - (-1)$

$$= \frac{5}{7} + 1$$

$$= \frac{5+7}{7}$$

$$= \frac{12}{7} = 1 \frac{5}{7}$$

$$\begin{aligned}
 8. \text{ The required no.} &= -\frac{2}{3} - \frac{1}{6} \\
 &= -\frac{2}{3} + \frac{1}{6} \\
 &= \frac{-4+1}{6} \\
 &= \frac{-3}{6} = -\frac{1}{2}
 \end{aligned}$$

Ex-1C

$$\begin{aligned}
 1. \quad & \frac{6}{7} \times \frac{-21}{12} \\
 \text{(iv)} \quad &= \frac{\cancel{6}^2}{7} \times \frac{-\cancel{21}^3}{\cancel{12}_2} \\
 &= -\frac{3}{2}
 \end{aligned}$$

$$\begin{aligned}
 \text{(vi)} \quad & \frac{-13}{15} \times \frac{-25}{26} \\
 &= \frac{-13}{\cancel{15}_3} \times \frac{-\cancel{25}^5}{\cancel{26}_2} \\
 &= \frac{+5}{6}
 \end{aligned}$$

$$2. \text{ iii) } \frac{0}{2} \rightarrow \frac{2}{0} \text{ does not exist}$$

$$v) \frac{2}{-5} \rightarrow -\frac{5}{2}$$

$$\begin{aligned}
 2. \text{ iv) } & -9 \div \left(\frac{-5}{18}\right) \\
 &= -9 \times -\frac{18}{5} \\
 &= +\frac{162}{5}
 \end{aligned}$$

7. given,
product = -7

$$\text{number 1} = -\frac{8}{11}$$

$$\text{number 2} = ?$$

$$\begin{aligned}\text{number 2} &= -7 \div -\frac{8}{11} \\ &= -7 \times -\frac{11}{8} \\ &= +\frac{77}{8} = 9\frac{5}{8}\end{aligned}$$

$$\begin{aligned}9. \text{ The required no.} &= \frac{1}{26} \div -\frac{8}{39} \\ &= \frac{1}{\cancel{26}_2} \times -\frac{\cancel{39}^3}{8} \\ &= -\frac{3}{16}\end{aligned}$$

$$\begin{aligned}10. & \left(\frac{13}{5} + \frac{-12}{7}\right) \div \left(-\frac{31}{7} \times \frac{1}{-2}\right) \\ &= \left(\frac{91 - 60}{35}\right) \div \frac{31}{14} \\ &= \frac{\cancel{35}^2}{5} \times \frac{14}{\cancel{31}^2} \\ &= \frac{2}{5}\end{aligned}$$

$$13. \text{ length} = 36\frac{3}{5} \text{ m}$$

$$\text{breadth} = 16\frac{2}{5} \text{ m}$$

$$\begin{aligned}\text{Area} &= l \times b \\ &= 36\frac{3}{5} \times 16\frac{2}{5} \\ &= \frac{183}{5} \times \frac{82}{5} \\ &= \frac{15006}{25} \text{ m}^2 \\ &= 600\frac{6}{25} \text{ m}^2\end{aligned}$$