

Board – CBSE

Class – 6th

Topic – Fractions Ex:7.2

Exercise – 7.2

Q1. Draw number lines and locate the points on them.

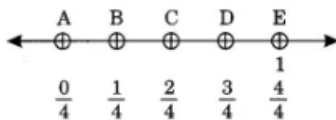
(a) $\frac{1}{2}, \frac{1}{4}, \frac{3}{4}, \frac{4}{4}$

(b) $\frac{1}{8}, \frac{2}{8}, \frac{3}{8}, \frac{7}{8}$

(c) $\frac{2}{5}, \frac{3}{5}, \frac{8}{5}, \frac{4}{5}$

Sol.

(a) $\frac{1}{2}, \frac{1}{4}, \frac{3}{4}, \frac{4}{4}$



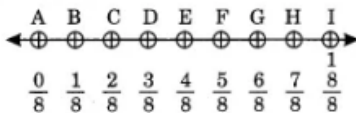
We have divided the number line from 0 to 1 into four equal parts.

C represents $\frac{2}{4}$ i. e., $\frac{1}{2}$

B represents $\frac{1}{4}$

D represents $\frac{3}{4}$ and E represents $\frac{4}{4}$ i. e., 1.

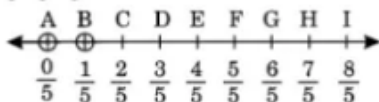
(b) $\frac{1}{8}, \frac{2}{8}, \frac{3}{8}, \frac{7}{8}$



We have divided the number line from 0 to 1 into eight equal parts.

B represents $\frac{1}{8}$ C represents $\frac{2}{8}$ D represents $\frac{3}{8}$ and H represents $\frac{7}{8}$

(c) $\frac{2}{5}, \frac{3}{5}, \frac{8}{5}, \frac{4}{5}$



From the above number line, we have

C represents $\frac{2}{5}$

D represents $\frac{3}{5}$ E represents $\frac{4}{5}$ and I represent $\frac{8}{5}$

Q2. Express the following as mixed fractions:

(a) $\frac{20}{3}$

(b) $\frac{11}{5}$

(c) $\frac{17}{7}$

(d) $\frac{28}{5}$

(e) $\frac{19}{6}$

(f) $\frac{35}{9}$

Sol.

(a) $\frac{20}{3}$

We have,

$$\begin{array}{r} 3 \overline{)20} \text{ (6)} \\ -18 \\ \hline 2 \end{array}$$

$$\therefore \frac{20}{3} = 6\frac{2}{3}$$

(b) $\frac{11}{5}$

We have,

$$\begin{array}{r} 5 \overline{)11} \text{ (2)} \\ -10 \\ \hline 1 \end{array}$$

$$\therefore \frac{11}{5} = 2\frac{1}{5}$$

(c) $\frac{17}{7}$

We have,

$$\begin{array}{r} 7 \overline{)17} \text{ (2)} \\ -14 \\ \hline 3 \end{array}$$

$$\therefore \frac{17}{7} = 2\frac{3}{7}$$

(d) $\frac{28}{5}$

We have,

$$\begin{array}{r} 5 \overline{)28} \text{ (5)} \\ -25 \\ \hline 3 \end{array}$$

$$\therefore \frac{28}{5} = 5\frac{3}{5}$$

(e) $\frac{19}{6}$

We have,

$$\begin{array}{r} 6 \overline{)19} \text{ (3)} \\ -18 \\ \hline 1 \end{array}$$

$$\therefore \frac{19}{6} = 3\frac{1}{6}$$

(f) $\frac{35}{9}$

We have,

$$\begin{array}{r} 9 \overline{)35} \text{ (3)} \\ -27 \\ \hline 8 \end{array}$$

$$\therefore \frac{35}{9} = 3\frac{8}{9}$$

Q3. Express the following as improper fractions:

(a) $7\frac{3}{4}$

(b) $5\frac{6}{7}$

(c) $2\frac{5}{6}$

(d) $10\frac{3}{5}$

(e) $9\frac{3}{7}$

(f) $8\frac{4}{9}$

Sol.

(a) $7\frac{3}{4} = \frac{7 \times 4 + 3}{4} = \frac{31}{4} \therefore 7\frac{3}{4} = \frac{31}{4}$

(b) $5\frac{6}{7} = \frac{5 \times 7 + 6}{7} = \frac{41}{7} \therefore 5\frac{6}{7} = \frac{41}{7}$

(c) $2\frac{5}{6} = \frac{2 \times 6 + 5}{6} = \frac{17}{6} \therefore 2\frac{5}{6} = \frac{17}{6}$

(d) $10\frac{3}{5} = \frac{10 \times 5 + 3}{5} = \frac{53}{5} \therefore 10\frac{3}{5} = \frac{53}{5}$

(e) $9\frac{3}{7} = \frac{9 \times 7 + 3}{7} = \frac{66}{7} \therefore 9\frac{3}{7} = \frac{66}{7}$

(f) $8\frac{4}{9} = \frac{8 \times 9 + 4}{9} = \frac{76}{9} \therefore 8\frac{4}{9} = \frac{76}{9}$