

Exercise 6.4

Q.1 Convert each of the following into a mixed fraction

(i) $\frac{28}{9}$

(ii) $\frac{226}{15}$

(iii) $\frac{145}{9}$

(iv) $\frac{128}{5}$

Solution: (i) $\frac{28}{9}$, we have
$$\begin{array}{r} 9 \overline{)28} \\ \underline{-27} \\ 1 \end{array}$$

here, Divisor = 9, quotient = 3, Remainder = 1

$\therefore \frac{28}{9} = 3\frac{1}{9}$

(ii) $\frac{226}{15}$, we have
$$\begin{array}{r} 15 \overline{)226} \\ \underline{-15} \\ 76 \\ \underline{-75} \\ 1 \end{array}$$

here, Divisor = 15, quotient = 15
Remainder = 1

$\therefore \frac{226}{15} = 15\frac{1}{15}$

(iii) $\frac{145}{9}$, we have
$$\begin{array}{r} 9 \overline{)145} \\ \underline{-9} \\ 55 \\ \underline{-54} \\ 1 \end{array}$$

Divisor = 9, quotient = 16
Remainder = 1

$\therefore \frac{145}{9} = 16\frac{1}{9}$

(iv) $\frac{128}{5}$, we have
$$\begin{array}{r} 5 \overline{)128} \\ \underline{-10} \\ 28 \\ \underline{-25} \\ 3 \end{array}$$

here, Divisor = 5, quotient = 25
Remainder = 3

$\therefore \frac{128}{5} = 25\frac{3}{5}$

Q2 Convert each of the following into an improper fraction

(i) $7\frac{1}{4}$ (ii) $8\frac{5}{7}$ (iii) $5\frac{3}{10}$ (iv) $12\frac{7}{15}$

Solution (i) $7\frac{1}{4} = \frac{(7 \times 4) + 1}{4} = \frac{28 + 1}{4} = \frac{29}{4}$

(ii) $8\frac{5}{7} = \frac{(8 \times 7) + 5}{7} = \frac{56 + 5}{7} = \frac{61}{7}$

(iii) $5\frac{3}{10} = \frac{(5 \times 10) + 3}{10} = \frac{50 + 3}{10} = \frac{53}{10}$

(iv) $12\frac{7}{15} = \frac{(12 \times 15) + 7}{15} = \frac{180 + 7}{15} = \frac{187}{15}$