EX 3A

* **Product**

(1) $\frac{5}{6} \times \frac{3}{7}$

$\Rightarrow \frac{5}{\cancel{6}_2} \times \frac{\cancel{3}^1}{7}$

$\Rightarrow \boxed{\frac{5}{14}}$

(2) $28 \times \frac{1}{8}$

$\Rightarrow \frac{\cancel{28}^7}{1} \times \frac{1}{\cancel{8}_2}$

$\Rightarrow \frac{7}{2}$

$\Rightarrow \boxed{24\frac{1}{2}}$

(3) $2\frac{1}{25} \times \frac{5}{17}$

$\Rightarrow \frac{\cancel{51}^3}{\cancel{25}_5} \times \frac{\cancel{5}^1}{\cancel{17}_1}$

$\Rightarrow \boxed{\frac{3}{5}}$

(4) $\frac{4}{17} \times 7\frac{1}{12}$

$\Rightarrow \frac{\cancel{4}^1}{\cancel{17}_1} \times \frac{\cancel{85}^5}{\cancel{12}_3}$

$\Rightarrow \boxed{\frac{5}{3}} \Rightarrow \boxed{1\frac{2}{3}}$

(5) $\frac{1}{19} \times 91 \times 5\frac{11}{13}$

$\Rightarrow \frac{1}{\cancel{19}_1} \times \cancel{91}^7 \times \frac{\cancel{76}^4}{\cancel{13}_1}$

$\Rightarrow \boxed{28}$

(6) A car can travel $12\frac{1}{2}$ km in 1 litre of petrol. How much distance can it travel in $42\frac{3}{5}$ litres of petrol?

→ Distance covered in 1 litre of petrol = $12\frac{1}{2}$ km

Distance covered in $42\frac{3}{5}$ litre of petrol = ?

$\Rightarrow 42\frac{3}{5} \times 12\frac{1}{2}$

$\Rightarrow \frac{213}{\cancel{5}_1} \times \frac{\cancel{25}^5}{2}$

$\Rightarrow \frac{1065}{2}$

$\Rightarrow \boxed{532\frac{1}{2} \text{ km}}$

If a cloth costs ₹ $715\frac{1}{4}$ per metre, find the cost of $3\frac{2}{5}$ metres of cloth.

Q13) cost of 1m cloth = ₹ $715\frac{1}{4}$

cost of $3\frac{2}{5}$ m cloth = ?

$\Rightarrow 715\frac{1}{4} \times 3\frac{2}{5}$

$\Rightarrow \frac{2861}{4} \times \frac{17}{5}$

$\Rightarrow \frac{48637}{20}$

$\Rightarrow$ ₹ $2431\frac{17}{20}$

Q15) A car travelled from city A to city B with a uniform speed of $52\frac{2}{7}$ km per hour. Find the distance between the two cities, if it took $4\frac{3}{8}$ hours for the car to reach city B from city A.

$\Rightarrow$ Distance covered in 1 hr = $52\frac{2}{7}$ km

Distance covered in $4\frac{3}{8}$ hrs = ?

$\Rightarrow 52\frac{2}{7} \times 4\frac{3}{8}$

$\Rightarrow \frac{366}{7} \times \frac{35}{8}$ (183, 5, 1, 4)

$\Rightarrow \frac{2745}{4}$

$\Rightarrow 288\frac{3}{4}$ km

2/16/19

Ex 3B CW

Reciprocal:-

1) $\frac{13}{17}$
$\Rightarrow \frac{17}{13}$
$\Rightarrow \boxed{1\frac{4}{13}}$

2) $\frac{3}{313}$
$\Rightarrow \frac{313}{3}$
$\Rightarrow 104\frac{1}{3}$

3) 217
$\Rightarrow \boxed{\frac{1}{217}}$

4) $\frac{1}{1024}$
$\Rightarrow 1024$

5) $3\frac{1}{3}$
$\Rightarrow \frac{10}{3}$
$\Rightarrow \boxed{\frac{3}{10}}$

6) $11\frac{1}{11}$
$\Rightarrow \frac{122}{11}$
$\Rightarrow \boxed{\frac{11}{122}}$

7) $1\frac{1}{2}$
$\Rightarrow \frac{3}{2}$
$\Rightarrow \boxed{\frac{2}{3}}$

8) $125\frac{1}{8}$
$\Rightarrow \frac{1001}{8}$
$\Rightarrow \boxed{\frac{8}{1001}}$

Q2) divide

(1) $\frac{1}{2} \div \frac{1}{3}$
$\Rightarrow \frac{1}{2} \times \frac{3}{1}$
$\Rightarrow \frac{3}{2} = \boxed{1\frac{1}{2}}$

(3) $1 \div 6\frac{2}{3}$
$\Rightarrow 1 \div \frac{20}{3}$
$\Rightarrow 1 \times \frac{3}{20}$
$\Rightarrow \boxed{\frac{3}{20}}$

(5) $12\frac{1}{2} \div \frac{5}{36}$
$\Rightarrow \frac{145}{2} \div \frac{5}{36}$
$\Rightarrow \frac{\cancel{145}^{29}}{\cancel{2}_{1}} \times \frac{36}{\cancel{5}_{1}}$
$\Rightarrow \boxed{187}$

(7) $\frac{20}{31} \div 54$
$\Rightarrow \frac{\cancel{20}^{10}}{31} \times \frac{1}{\cancel{54}_{27}}$
$\Rightarrow \boxed{\frac{10}{837}}$

(9) $32\frac{1}{2} \div 8\frac{3}{4}$
$\Rightarrow \frac{65}{2} \div \frac{35}{4}$
$\Rightarrow \frac{\cancel{65}^{13}}{\cancel{2}_{1}} \times \frac{4}{\cancel{35}_{7}}$
$\Rightarrow \frac{26}{7}$
$\Rightarrow \boxed{3\frac{5}{7}}$

11) $6\frac{3}{16} \div 3\frac{1}{7}$

$\Rightarrow \frac{99}{16} \div \frac{22}{7}$

$\Rightarrow \frac{99}{16} \times \frac{7}{22_2}$

$\Rightarrow \frac{63}{32}$

$\Rightarrow \boxed{1\frac{31}{32}}$

Q3 By what fraction should $\frac{9}{35}$ be multiplied to get $\frac{7}{15}$?

$\Rightarrow$ Let the required fraction be x.

$\Rightarrow \frac{9}{35} \times x = \frac{7}{15}$

$\Rightarrow x = \frac{7}{15} \div \frac{9}{35}$

$\Rightarrow x = \frac{7}{\cancel{15}_3} \times \frac{\cancel{35}^7}{9}$

$\Rightarrow x = \frac{49}{27}$

$\Rightarrow x = \boxed{1\frac{22}{27}}$

Q5) How many pieces of length $3\frac{5}{7}$ m each can be cut from a wall paper of 52 m long?

⇒ Length of wall paper = 52 m

⇒ Length of each piece = $3\frac{5}{7}$ m

⇒ No. of pieces.

⇒ $52 \div 3\frac{5}{7}$

⇒ $52 \div \frac{26}{7}$

⇒ $\cancel{52}^{2} \times \frac{7}{\cancel{26}}$

⇒ 14 pieces

Q7 A car covers $641\frac{1}{4}$ km in $43\frac{1}{8}$ litres of fuel. How much distance can this car cover in 1 litre of petrol.

⇒ Distance covered in $43\frac{1}{8}$ litres of fuel = $641\frac{1}{4}$ km

⇒ Distance covered by in 1 litre = (?)

⇒ $641\frac{1}{4} \div 43\frac{1}{8}$

⇒ $\frac{2565}{4} \div \frac{345}{8}$

⇒ $\frac{\cancel{2565}^{\cancel{513}^{171}}}{\cancel{4}_{1}} \times \frac{\cancel{8}^{2}}{\cancel{345}_{\cancel{69}23}}$

⇒ $\frac{342}{23}$

⇒ $14\frac{20}{23}$ km

Q9) The area of a sheet of paper is $623\frac{7}{10}$ sq.cm. If its length is $29\frac{7}{10}$ cm, find its width.

⇒ Area of paper = $623\frac{7}{10}$ sq.cm.

⇒ Length = $29\frac{7}{10}$

⇒ Breadth = (?)

⇒ ~~Breadth~~ =

⇒ $623\frac{7}{10} \div 29\frac{7}{10}$

⇒ $\frac{6237}{10} \div \frac{297}{10}$

⇒ $\frac{6237}{10} \times \frac{10}{297}$

⇒ 21cm

Q10) A car travel $283\frac{1}{2}$ km in $4\frac{2}{3}$ hours. How fare does this car go in 1hour, travelling at the same speed?

⇒ Distance covered in $4\frac{2}{3}$ hrs = $283\frac{1}{2}$ km

⇒ Distance covered in 1hrs = (?)

⇒ $283\frac{1}{2} \div 4\frac{2}{3}$

⇒ $\frac{567}{2} \div \frac{14}{3}$

⇒ $\frac{567}{2} \times \frac{3}{14}$

⇒ $\frac{243}{4}$

⇒ $60\frac{3}{4}$ km