

Q:- (1) Find:

(i) $\frac{1}{4}$ of (a) $\frac{1}{4}$

(b) $\frac{1}{4}$ of $\frac{3}{5}$

Solⁿ:- $\frac{1}{4} \times \frac{1}{4} = \frac{1 \times 1}{4 \times 4} = \frac{1}{16}$

Solⁿ:- $\frac{1}{4} \times \frac{3}{5} = \frac{1 \times 3}{4 \times 5} = \frac{3}{20}$

(c) $\frac{1}{4}$ of $\frac{4}{3} \Rightarrow \frac{1}{4} \times \frac{4}{3} = \frac{1 \times 4}{4 \times 3} = \frac{1}{3}$

(ii) $\frac{1}{7}$ of (a) $\frac{2}{9} \Rightarrow \frac{1}{7} \times \frac{2}{9} = \frac{1 \times 2}{7 \times 9} = \frac{2}{63}$

Q:- (2) Multiply and reduce to lowest form (if possible):

(i) $\frac{2}{3} \times \frac{2}{3}$

Solⁿ:- $\frac{2}{3} \times \frac{2}{3} = \frac{2 \times 2}{3 \times 3} = \frac{4}{9}$

$$\begin{array}{r} 9 \overline{) 16} \\ \underline{-9} \\ 7 \end{array} \Rightarrow 1\frac{7}{9}$$

(ii) $\frac{2}{7} \times \frac{7}{9}$

Solⁿ:- $\frac{2}{7} \times \frac{7}{9} = \frac{2 \times 7}{7 \times 9} = \frac{2}{9}$

(iii) $\frac{3}{8} \times \frac{6}{4}$

Solⁿ:- $\frac{3}{8} \times \frac{6}{4} = \frac{3 \times 6}{8 \times 4} = \frac{3 \times 3}{8 \times 2} = \frac{9}{16}$

(iv) $\frac{9}{5} \times \frac{3}{5}$

Solⁿ:- $\frac{9}{5} \times \frac{3}{5} = \frac{9 \times 3}{5 \times 5} = \frac{27}{25} = 1\frac{2}{25}$

$$\begin{array}{r} 25 \overline{) 27} \\ \underline{-25} \\ 2 \end{array} \Rightarrow 1\frac{2}{25}$$

(v) $\frac{1}{3} \times \frac{15}{8}$

Solⁿ:- $\frac{1}{3} \times \frac{15}{8} = \frac{1 \times 15}{3 \times 8} = \frac{15}{24}$

(vi) $\frac{11}{2} \times \frac{3}{10} \Rightarrow \frac{11 \times 3}{2 \times 10} = \frac{33}{20} = 1\frac{13}{20}$

$$\begin{array}{r} 20 \overline{) 33} \\ \underline{-20} \\ 13 \end{array} \Rightarrow 1\frac{13}{20}$$

Q:- (3) Multiply the following fractions:

(i) $\frac{2}{5} \times 5\frac{1}{4}$

Solⁿ:- $\frac{2}{5} \times \frac{21}{4} = \frac{2 \times 21}{5 \times 4} = \frac{1 \times 21}{5 \times 2} = \frac{21}{10} = 2\frac{1}{10}$

$$\begin{array}{r} 10 \overline{) 21} \text{ (2)} \\ \underline{-20} \\ 1 \end{array} \Rightarrow 2\frac{1}{10}$$

(ii) $6\frac{2}{5} \times \frac{7}{9}$

Solⁿ:- $\frac{32}{5} \times \frac{7}{9} = \frac{32 \times 7}{5 \times 9} = \frac{224}{45} = 4\frac{44}{45}$

$$\begin{array}{r} 45 \overline{) 224} \text{ (4)} \\ \underline{180} \\ 44 \end{array}$$

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

Solⁿ:- $\frac{3}{2} \times \frac{16}{3} = \frac{3 \times 16}{2 \times 3} = \frac{16}{2} = \frac{8}{1} = 8$

$$\Rightarrow 4\frac{44}{45}$$

for home work \rightarrow iv, v, vi, vii.

Q:- (4) which is greater?

(i) $\frac{2}{7}$ of $\frac{3}{4}$ or $\frac{3}{5}$ of $\frac{5}{8}$

Solⁿ:- $\frac{2}{7} \times \frac{3}{4}$ or $\frac{3}{5} \times \frac{5}{8}$

$\frac{2 \times 3}{7 \times 4}$ or $\frac{3 \times 5}{5 \times 8}$

$\frac{3}{14}$ or $\frac{3}{8}$

$\Rightarrow \frac{3}{14} < \frac{3}{8}$

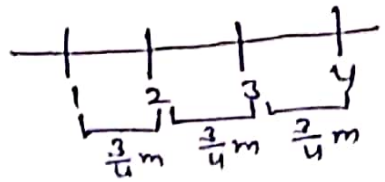
Thus, $\frac{3}{5}$ of $\frac{5}{8}$ is greater.

(ii) $\frac{1}{2}$ of $\frac{6}{7}$ or $\frac{2}{3}$ of $\frac{3}{7}$

Solⁿ:- for your home work.

Q:-(5)

Soln:- Given, said plants 4 saplings.



\therefore Distance b/w two adjacent sapling = $\frac{3}{4}m$

Here number of gap in saplings = 3

Therefore,

The distance between the first and last saplings = $3 \times \frac{3}{4} = \frac{9}{4} = 2\frac{1}{4}$
= x =

Q:-(6)

Soln:- Time taken by Lipika to read a book = $1\frac{3}{4}$ hours.

\therefore She reads entire book in 6 days.

So, hours taken by her to read the entire book = $6 \times 1\frac{3}{4}$
= $6 \times \frac{7}{4}$

$$= \frac{42}{4} = \frac{21}{2} = 10\frac{1}{2} \text{ hours}$$

Thus, $10\frac{1}{2}$ hours were required by her to read the book.
= x =

Q:-(7)

Soln:- Given,

In 1 litre petrol, car covers the distance = 16 km.

So, In $2\frac{3}{4}$ litre petrol, car covers the distance

$$= 2\frac{3}{4} \text{ of } 16 \text{ km}$$

$$= 2\frac{3}{4} \times 16$$

$$= \frac{11}{4} \times 16$$

$$= \frac{11 \times 16}{4}$$

$$= 44 \text{ km.}$$

Thus, the car will cover 44 km distance.
= x =

Q:-(8)

(a) (i) Provide the number in the box \square , such that $\frac{2}{3} \times \square = \frac{10}{30}$.

Solⁿ:-

$$\frac{2}{3} \times \frac{5}{10} = \frac{10}{30}$$

(ii) The simplest form of the number obtained in \square is: $\frac{5}{10} = \frac{1}{2}$

(b) (i)

$$\frac{3}{5} \times \frac{8}{15} = \frac{24}{75}$$

(ii) Simplest form of ~~$\frac{24}{75}$~~ $\frac{8}{15}$ is $\frac{8}{15}$.

=x=