

Fractions of a Quantity

To find $\frac{2}{3}$ of a number (like 15), you do it **using 2 steps**.

Step 1 :- Find $\frac{1}{3}$ of 15 first ($\div 3$) $\Rightarrow \frac{1}{3}$ of 15 = $15 \div 3 = 5$

Step 2 :- Now find $\frac{2}{3}$ of 15 by ($\times 2$) $\Rightarrow \frac{2}{3}$ of 15 = $5 \times 2 = 10$

Set the working down as follows :-

$$\frac{3}{5} \text{ of } 25 \Rightarrow (25 \div 5) \Rightarrow 5 \times 3 = 15.$$

$$\frac{2}{7} \text{ of } 35 \Rightarrow (35 \div 7) \Rightarrow 5 \times 2 = 10.$$

$$\frac{7}{10} \text{ of } 60 \Rightarrow (60 \div 10) \Rightarrow 6 \times 7 = 42.$$

Rule :-

To find a fraction, like $\frac{5}{8}$ of something,

\Rightarrow "divide by the denominator" (8)

\Rightarrow then "multiply by the numerator" (5)

Be able to find any fraction of a quantity

Exercise 5

1. Do the following :-

a $\frac{2}{5}$ of 30 = $(30 \div 5) \Rightarrow$ then $6 \times 2 = \dots$

b $\frac{3}{4}$ of 24 = $(24 \div \dots) \Rightarrow$ then $\dots \times 3 = \dots$

c $\frac{5}{6}$ of 18

d $\frac{4}{5}$ of 20

e $\frac{3}{8}$ of 40

f $\frac{7}{10}$ of 100

g $\frac{2}{3}$ of 66

h $\frac{2}{9}$ of 27

i $\frac{4}{9}$ of 63

j $\frac{3}{11}$ of 44

k $\frac{9}{10}$ of 80

l $\frac{2}{5}$ of 35

m $\frac{2}{7}$ of 21

n $\frac{7}{8}$ of 56

o $\frac{3}{4}$ of 400

p $\frac{3}{10}$ of 1000

q $\frac{2}{15}$ of 30

r $\frac{4}{7}$ of 35

s $\frac{7}{10}$ of 60

t $\frac{5}{9}$ of 63

u $\frac{5}{8}$ of 32

v $\frac{3}{16}$ of 32

w $\frac{9}{10}$ of 200

x $\frac{7}{100}$ of 300

y $\frac{7}{10}$ of 80

z $\frac{9}{20}$ of 60.

2. Do the following :-

a $\frac{2}{17}$ of 1700 grams

b $\frac{2}{15}$ of £15 000

c $\frac{9}{11}$ of €330

d $\frac{18}{19}$ of 19 kg

e $\frac{7}{20}$ of 60 ml

f $\frac{3}{19}$ of 38 kg

g $\frac{3}{50}$ of \$100

h $\frac{4}{15}$ of 150 metres

i $\frac{8}{12}$ of 6 litres.

