Fractions of a Quantity (basic)

Be able to find a basic fraction of a number

To find $\frac{1}{4}$ of something, you **divide** by 4.

To find $\frac{1}{6}$ **divide** by 6

To find $\frac{1}{10}$ **divide** by 10.

Examples :-

Find: a $\frac{1}{4}$ of 20 b $\frac{1}{6}$ of 18 c $\frac{1}{10}$ of 80

a $20 \div 4 = 5$

b $18 \div 6 = 3$

c $80 \div 10 = 8$

Exercise 4

1. Find :-

a $\frac{1}{3}$ of 15 b $\frac{1}{2}$ of 40 c $\frac{1}{4}$ of 24

d $\frac{1}{5}$ of 30 e $\frac{1}{3}$ of 21 f $\frac{1}{5}$ of 60

g $\frac{1}{4}$ of 60 h $\frac{1}{3}$ of 48 i $\frac{1}{4}$ of 100

j $\frac{1}{3}$ of 120 k $\frac{1}{5}$ of 300 l $\frac{1}{2}$ of 150.

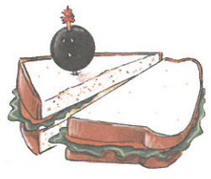
2. Find :-

a $\frac{1}{7}$ of 21 b $\frac{1}{8}$ of 48 c $\frac{1}{9}$ of 72

d $\frac{1}{8}$ of 72 e $\frac{1}{6}$ of 84 f $\frac{1}{10}$ of 340

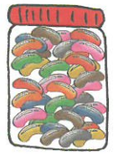
g $\frac{1}{8}$ of 400 h $\frac{1}{9}$ of 810 i $\frac{1}{7}$ of 140.

3. a There are 36 desks in a classroom.
$\frac{1}{4}$ of them are in need of repair.
How many desks need repaired ?

b 

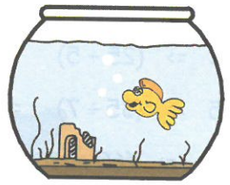
A cafe served 42 packs of sandwiches one lunchtime.
$\frac{1}{3}$ of the packs were lettuce and tomato.
How many lettuce and tomato sandwiches were sold ?

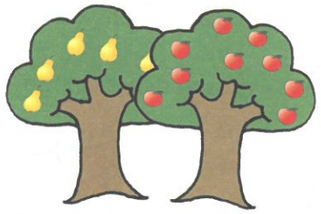
3. c Last week, Citreault produced 60 new cars.
$\frac{1}{5}$ of the cars were exported to France.
How many cars went to France ?

d 

There are 48 jelly beans in a jar.
$\frac{1}{6}$ of them are red.
How many red jelly beans are there ?

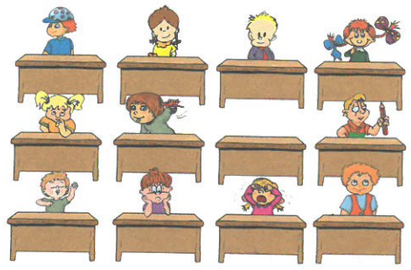
e A tank in a pet shop held 40 tropical fish.
$\frac{1}{8}$ of them were goldfish.
(i) How many goldfish were there in the tank ?
(ii) How many of fish were **not** goldfish ?



f 

$\frac{1}{10}$ of the trees in an orchard were pear trees and $\frac{1}{5}$ of them were apple.
If there were 60 trees altogether in the orchard,
(i) how many pear trees were there
(ii) how many apples trees ?

4. Jerry was on a 60 kilometre cycling trip for charity.
He got a puncture **one third** of the way into the trip.
a How far had Jerry cycled before the puncture ?
b How many kilometres had he still to go ?

5. 

There are 36 children in Primary 5.
- a **third** of them have dark brown hair.
- a **quarter** of them have light brown hair.
- a **sixth** of them have black hair.
- a **ninth** of them are blondes.

The rest have red hair.

How many of the class have hair that is :-

a dark brown b light brown c black
d blonde e red f brown ?

6. I'm thinking of a number. I can find a $\frac{1}{2}$ of it with no remainder. I can find a $\frac{1}{3}$ of it with no remainder. I can find a $\frac{1}{5}$ of it with no remainder. I can find a $\frac{1}{6}$ of it with no remainder.
When I try to find a $\frac{1}{7}$ of the number I'm left with a remainder of 4.
Can you find the number I am thinking of ? (*It is smaller than 100 !*).