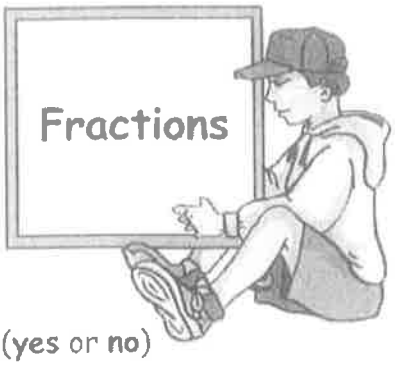
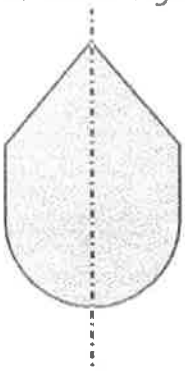
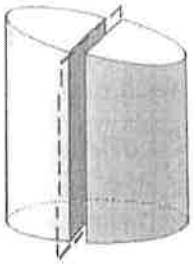
CHAPTER 16

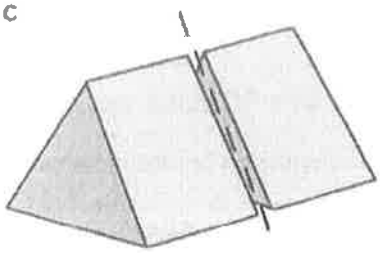


Consolidation

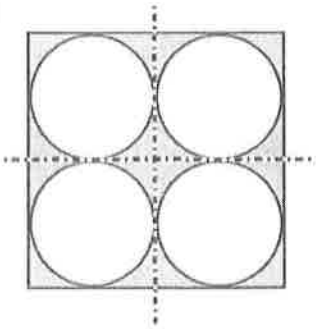
1. Which of these figures have been cut exactly in half ? (**yes** or **no**)

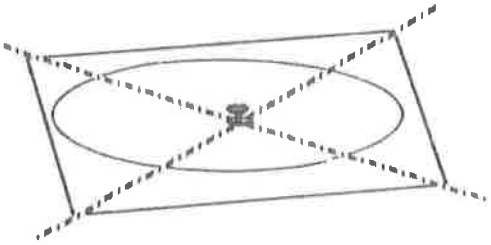
a 

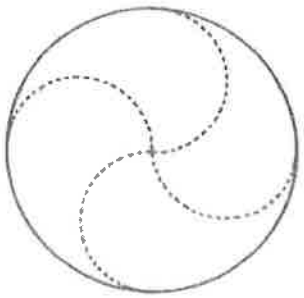
b 

c 

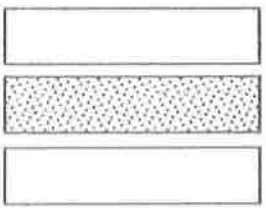
2. Which of these shapes have been cut exactly into quarters ? (**yes** or **no**)

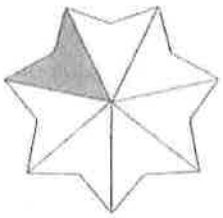
a 

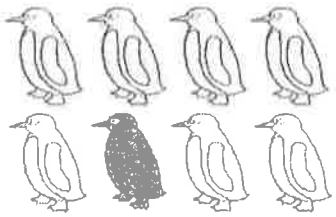
b 

c 

3. What fraction has been shaded in each of these ?

a 

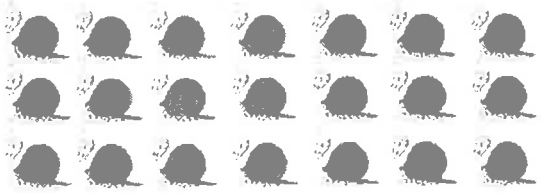
b 

c 

4. There are 21 snails in my garden.

$\frac{1}{3}$ of them are eating my plants.

How many snails are doing that ?



5. **a** What is a **half** of £20 ?

b What is a **quarter** of 32 centimetres ?

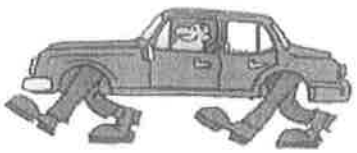
Exercise 1

1. Find :-

a	$\frac{1}{2}$ of 80p	b	$\frac{1}{3}$ of 27 metres	c	$\frac{1}{5}$ of 45 grams
d	$\frac{1}{10}$ of £120	e	$\frac{1}{4}$ of 28 litres	f	$\frac{1}{6}$ of £84
g	$\frac{1}{8}$ of 72 cm	h	$\frac{1}{7}$ of 84p	i	$\frac{1}{9}$ of £54.

2. It's 45 miles by road from my work in Greenock to my home.

My car broke down when I was $\frac{1}{3}$ of the way home.



a How far had I travelled from work ?

b How far had I still to travel to reach my house ?

3. 

Tulisa went to the baths on only one day last September.

What fraction of that month was that ?

4. My electric keyboard has 76 keys.

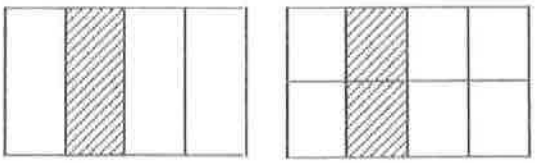
$\frac{1}{4}$ of the keys on my keyboard are not working !

How many keys **are** working ?

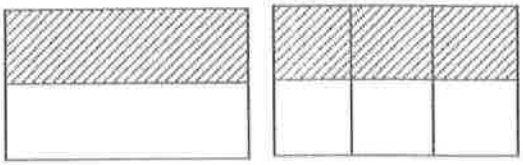
Exercise 2

1. Use each pair of drawings below to write down the 2 fractions that are shown to be **equivalent** to each other.

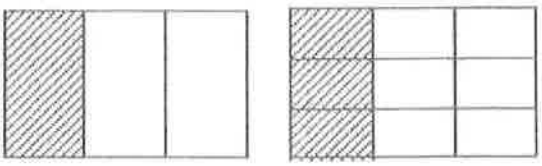
a



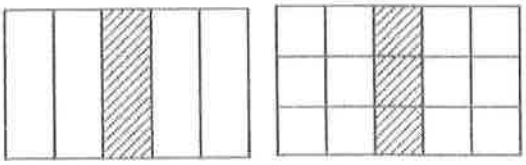
b



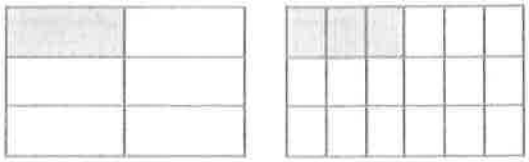
c



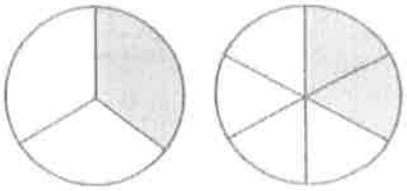
d



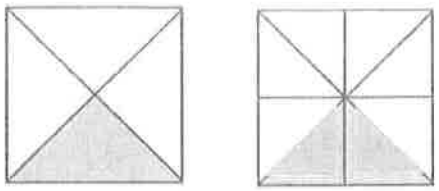
1. e



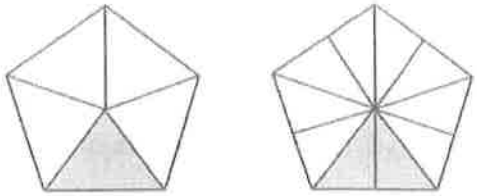
f



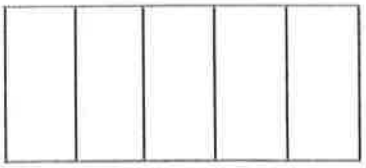
g

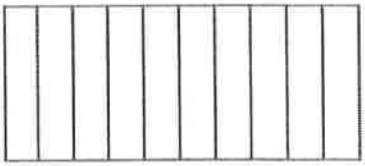


h



2. Draw or trace these figures.





a In the first one, shade or colour in 3 parts.

b What fraction have you shaded ?

c Shade (or colour in) the correct number of parts in the 2nd figure so that both represent equivalent fractions.

d Use your drawings to complete :-

$$\frac{?}{5} = \frac{?}{10}.$$

Exercise 3

1. What fraction does each bit represent on each of these number lines ?

a

b

c

d

e

f

2. What number is each arrow pointing to ?

a 

b 

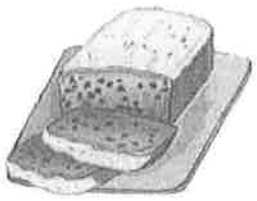
3. Put these two lists of fractions in order, starting with the **highest** each time.

a $\frac{1}{3}$, $\frac{1}{7}$, $\frac{1}{2}$, $\frac{1}{5}$.

b $\frac{1}{8}$, $\frac{1}{10}$, $\frac{1}{6}$, $\frac{1}{15}$, $\frac{1}{9}$.

4. Draw a number line diagram to show the number $7\frac{3}{4}$.

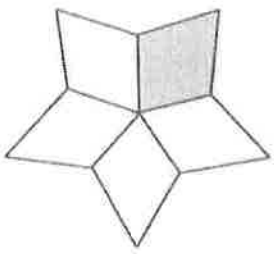
Revision Exercise

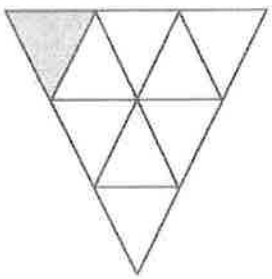


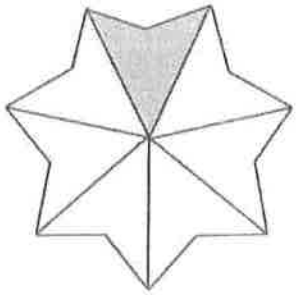
1. This fruit loaf is to be cut into 7 slices.
   What fraction of the loaf has already been cut ?

2. The cost of a night out at a restaurant is to be shared among 8 friends.
   What fraction of the bill does each of them have to pay ?

3. What fraction of each shape has been coloured ?

a 

b 

c 

4. What fraction (or number) is represented on each of these number lines ?

a 

b 

c 

d 

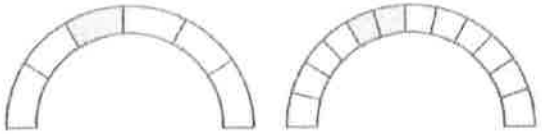
5. What is :-

a $\frac{1}{2}$ of 48p b $\frac{1}{5}$ of 75p c $\frac{1}{9}$ of 540 cm ?

6. Each diagram below shows 2 fractions that are **equivalent**.

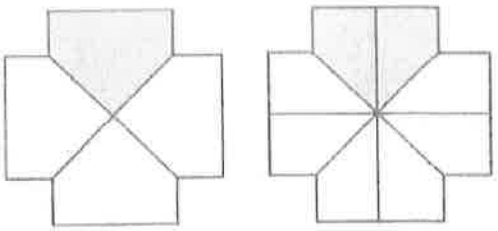
Write down what the fractions are.

a



$\frac{1}{6}$ = $\frac{\ldots\ldots}{\ldots\ldots}$

b



$\frac{1}{4}$ = $\frac{\ldots\ldots}{\ldots\ldots}$

7. Write down a fraction which you think is **equivalent** to $\frac{1}{7}$.

8. There are 72 mugs set out on a table at a school fete.

$\frac{1}{3}$ of them are for coffee, the rest are for tea.

a How many mugs are for coffee ?

b How many mugs are for tea ?

9. It's 60 miles by bus from my house in the country to my school.

Last Monday, my school bus had a puncture when it had only gone $\frac{1}{10}$ of the way to school.

a How far had the bus gone ?

b How far had it still to go to school ?

10. 

From the birthday money he got from his gran, George spent $\frac{1}{3}$ of it on a second hand computer game.

The game cost £15.

a How much did his gran give George ?

b How much of his birthday money had he left ?