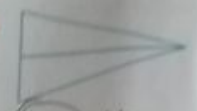
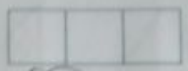
Exercise 7A

1 Ring yes for equal parts and no for unequal parts.

a  Yes No

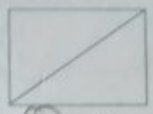
b  Yes No

c  Yes No

d  Yes No

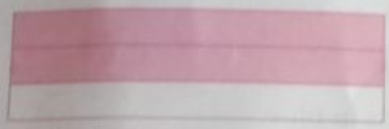
e  Yes No

f  Yes No

g  Yes No

h  Yes No

2 Write the fractions for the shaded parts.

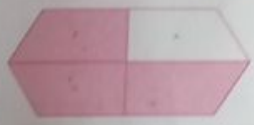
a 

Pink
2 green parts
3 equal parts in all

b  $\frac{1}{4}$

c  $\frac{2}{4}$

d  $\frac{1}{3}$

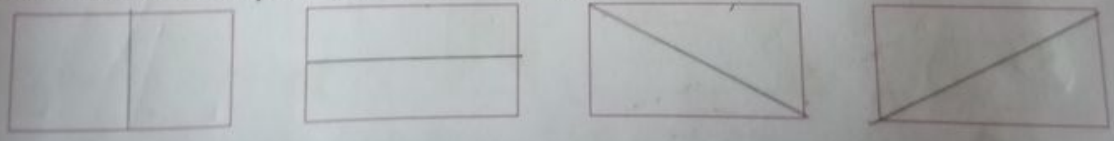
e  $\frac{3}{4}$

f  $\frac{1}{4}$

g  $\frac{2}{3}$

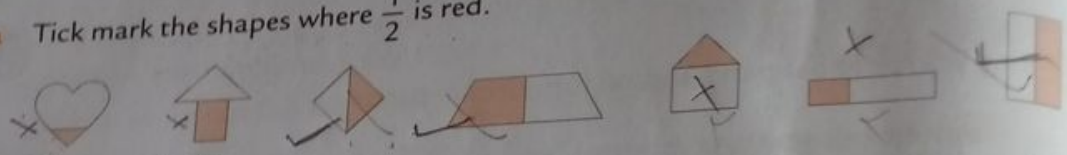
h  $\frac{1}{2}$

3 a Find 4 different ways to put these rectangles into halves.



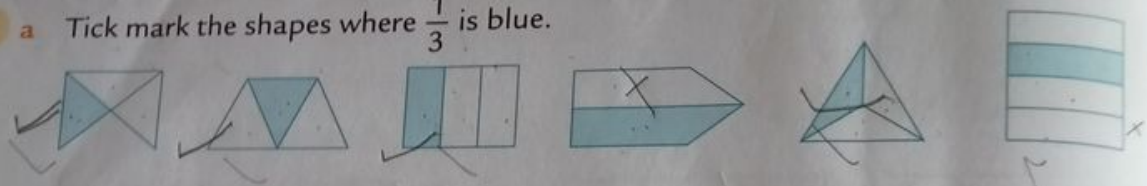
b Find 4 different ways to put these squares into quarters.

4 a Tick mark the shapes where $\frac{1}{2}$ is red.

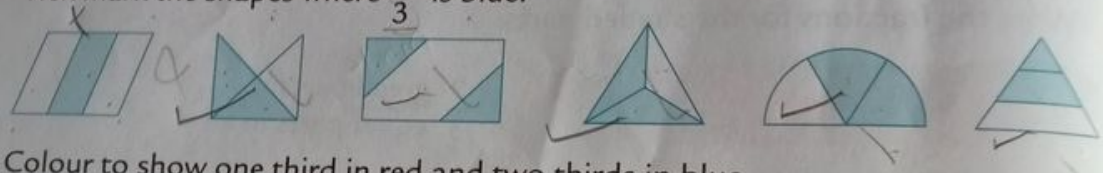


b Colour one half.

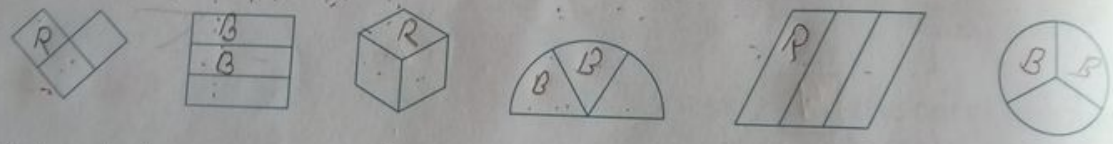
5 a Tick mark the shapes where $\frac{1}{3}$ is blue.



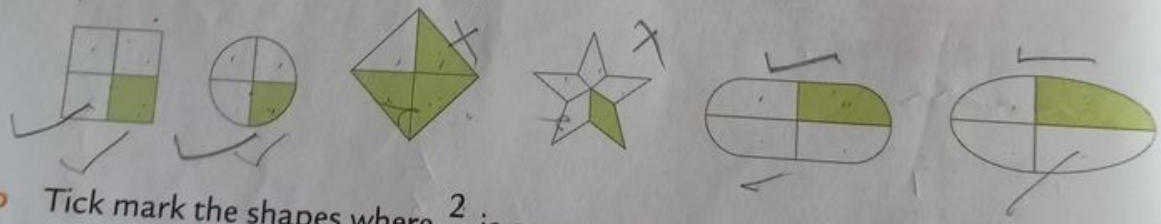
b Tick mark the shapes where $\frac{2}{3}$ is blue.



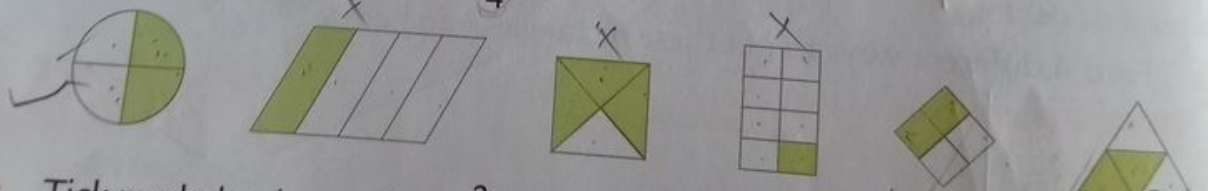
c Colour to show one third in red and two thirds in blue.



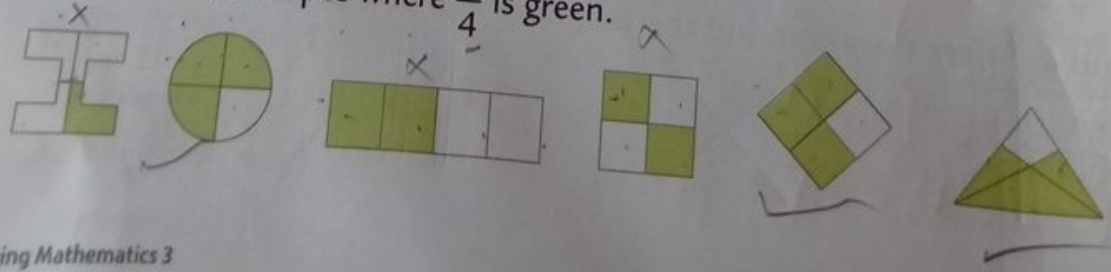
6 a Tick mark the shapes where $\frac{1}{4}$ is green.



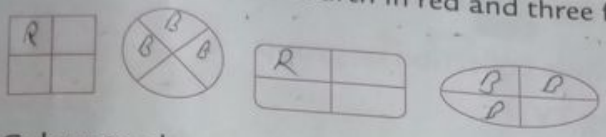
b Tick mark the shapes where $\frac{2}{4}$ is green.



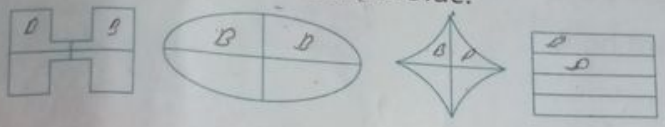
c Tick mark the shapes where $\frac{3}{4}$ is green.

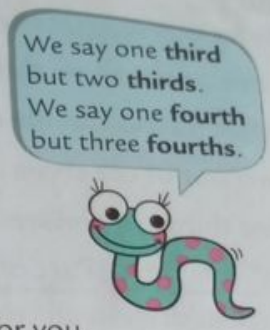


d Colour to show one fourth in red and three fourths in blue.

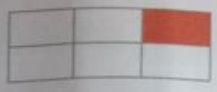


e Colour to show two fourths blue.





7 Write two fractions for each as shown. One has been done for you.

a 

$\frac{1}{6}$ is red.

$\frac{5}{6}$ is not red.

b 

$\frac{2}{5}$ is blue.

$\frac{3}{5}$ is not blue.

c 

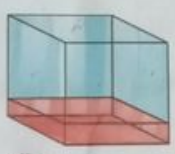
$\frac{6}{8}$ is green.

$\frac{2}{8}$ is not green.

8 Choose a fraction to show about how much each one holds.

a 

$\frac{3}{4}$ $\frac{1}{2}$ $\frac{2}{3}$

b 

$\frac{1}{5}$ $\frac{1}{2}$ $\frac{3}{4}$

c 

$\frac{2}{3}$ $\frac{1}{2}$ $\frac{3}{4}$

d 

$\frac{1}{2}$ $\frac{1}{3}$ $\frac{2}{3}$

9 Say whether true or false.

a $\frac{1}{2}$ the glass has water. ✗

b $\frac{1}{2}$ the burger is eaten.

c $\frac{1}{2}$ of the chocolate is left. ✗

d 4 people have shared this cake fairly.

e $\frac{1}{3}$ of the farm grew rice. ✗

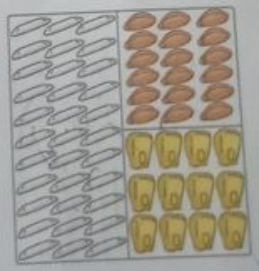
f $\frac{2}{3}$ of the garden had roses. ✗

a 

b 

c 

d 

e 

f 

B FRACTION OF A COLL

Fractions also refer to part of a whole collection or group.

Look at the three children watching TV.

What fraction of the children are boys?

Two out of the three children are boys.

Two thirds of children are boys.

$\frac{2}{3}$ Boys (Part of the group) / Children in all (the whole group)

$\frac{2}{3}$ of the children are boys.

There are 4 mugs in all.
1 mug is green. The rest are red.

One fourth of the mugs are green.

$\frac{1}{4}$ Green mug (part of the collection) / All the mugs (the whole collection)

Three fourths of the mugs are red.

$\frac{3}{4}$ Red mugs (part of the collection) / All the mugs (the whole collection)

We do not say $\frac{1}{4}$ of the mugs *is* green, because we are referring to a collection!

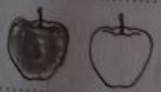
Exercise 7B

1 Colour to show the fraction.

$\frac{3}{4}$

$\frac{1}{3}$

$\frac{1}{4}$



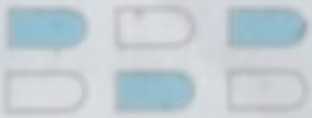
$\frac{1}{2}$

$\frac{2}{3}$

Project Half a chocolate is as tasty as a full chocolate, but half a 10-rupee note is of no use. Find three things that can be used if you put them in halves and three things that cannot be used if put into halves.

2 Write two fractions for each. One has been done for you.

a 

b 

$\frac{3}{5}$ is pink.

$\frac{2}{5}$ is not pink.

$\frac{3}{5}$ is blue.

$\frac{2}{5}$ is not blue.

First colour the Indian flag and then answer the following que

What fraction of the Indian flag is:

a White?

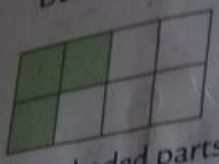
b Orange?

c Green?

Fractions name parts being ...

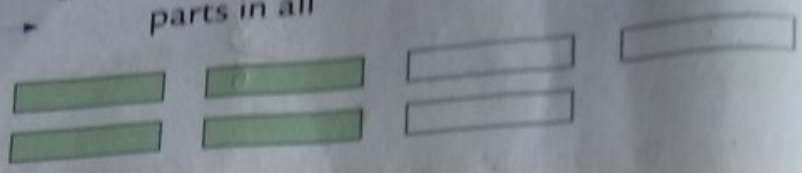
Numerator
Denominator

parts in all



$\frac{3}{8}$ shaded parts / equal parts in all

$\frac{3}{8}$ Numerator / Denominator



$\frac{4}{7}$ shaded rectangles / rectangles in all

$\frac{4}{7}$ Numerator / Denominator

- When there are no shaded parts, the numerator is '0'.
- There can be no fraction with zero as the denominator.

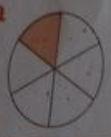
 $= \frac{0}{2}$

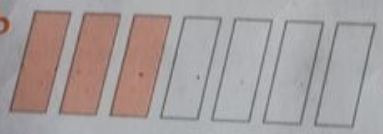
- When the numerator and the denominator are the same, it is a whole or 1.

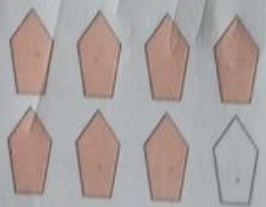
 $\frac{2}{2} = 1$ (region)  $\frac{3}{3} = 1$ (collection)

Exercise 7C

1 Complete the table based on the figures below.

a 

b 

c 

d 

e 

f 

Figure	a	b	c	d	e	f
Number of shaded parts (Numerator)	1	3	7	5	2	—
Number of parts in all (Denominator)	6	7	8	5	9	12
Fraction of shaded parts	$\frac{1}{6}$	$\frac{3}{7}$	$\frac{7}{8}$	$\frac{5}{5}$	$\frac{2}{9}$	$\frac{12}{12}$

Exercise 7D

1 Colour one half. One has been done for you.

2 a 

10 ÷ 2 = 5

$\frac{1}{2}$ of 10 = 5

b 

14 ÷ 2 = 7

$\frac{1}{2}$ of 14

c 

20 ÷ 2 = 10

$\frac{1}{2}$ of 20 = 10

2 Colour one third. One has been done for you.

3 a 

6 ÷ 3 = 2

$\frac{1}{3}$ of 6 = 2

b 

12 ÷ 3 = 4

$\frac{1}{3}$ of 12 = 4

c 

15 ÷ 3 = 5

$\frac{1}{3}$ of 15 = 5

3 Colour one fourth. One has been done for you.

4 a 

20 ÷ 4 = 5

$\frac{1}{4}$ of 20 = 5

b 

12 ÷ 4 = 3

$\frac{1}{4}$ of 12 = 3

c 

16 ÷ 4 = 4

$\frac{1}{4}$ of 16 = 4

4 Solve the following.

a $\frac{1}{4}$ of 36 = 36 ÷ 4 = 9

b $\frac{1}{3}$ of 18 = 18 ÷ 3 = 6

c $\frac{1}{2}$ of 16 = 16 ÷ 2 = 8

d $\frac{1}{4}$ of 28 = 28 ÷ 4 = 7

e $\frac{1}{2}$ of 20 = 20 ÷ 2 = 10

f $\frac{1}{3}$ of 30 = 30 ÷ 3 = 10

5 Use the pictures to solve. Prices are given for 1 kg.

₹ 26 ₹ 24 ₹ 32 ₹ 40

$\frac{1}{2}$ kg apples for ₹ 13

$\frac{1}{4}$ kg chikoos for ₹ $\frac{1}{4}$ of 32 = 8

1 kg mangoes for ₹ 40

I spent ₹ 13 + 8 + 40 =

$\frac{1}{3}$ kg grapes for ₹ $\frac{1}{3}$ of 24 = 24 ÷ 3 = 8

$\frac{1}{2}$ kg mangoes for ₹ $\frac{1}{2}$ of 40 = 40 ÷ 2 =

$\frac{1}{2}$ kg chikoos for ₹ $\frac{1}{2}$ of 32 = 32 ÷ 2 = 16

I spent ₹ 20 + 16 + 3 =

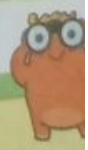
6 a Malasha ate one fourth of the toffees. How many did she eat?

$\frac{1}{4}$ of 8 = 8 ÷ 4 = 2 2 toffees

b Nasir read one half of his books. How many books did he read?

$\frac{1}{2}$ of 4 = 4 ÷ 2 = 2 2 books

c Ajay bought 5 cans of paints and used 3 cans. What fraction of the paint did he use? $\frac{3}{5}$ Ans



Try This! Find:

1 $\frac{1}{2}$ of 1 dozen books.