

1 How many small squares in each shape? _____

2 Write the number coloured in each shape as a fraction and a decimal.

a	$\frac{10}{100} = 0.10$	b	$\frac{\quad}{100} = \underline{\quad}$	c	$\frac{\quad}{100} = \underline{\quad}$	d	$\frac{\quad}{100} = \underline{\quad}$	e	$\frac{\quad}{100} = \underline{\quad}$
f	$\frac{\quad}{100} = \underline{\quad}$	g	$\frac{\quad}{100} = \underline{\quad}$	h	$\frac{\quad}{100} = \underline{\quad}$	i	$\frac{\quad}{100} = \underline{\quad}$	j	$\frac{\quad}{100} = \underline{\quad}$
k	$\frac{\quad}{100} = \underline{\quad}$	l	$\frac{\quad}{100} = \underline{\quad}$	m	$\frac{\quad}{100} = \underline{\quad}$	n	$\frac{\quad}{100} = \underline{\quad}$	o	$\frac{\quad}{100} = \underline{\quad}$

3 Write the decimals in ascending order.

4 Write: a the largest fraction. _____ b the smallest fraction. _____



Percentages

Percent
means out of 100.
5% is $\frac{5}{100}$
60% is $\frac{60}{100}$

Equivalency

1 Express each of the diagrams on page 68 as a fraction and a percentage.

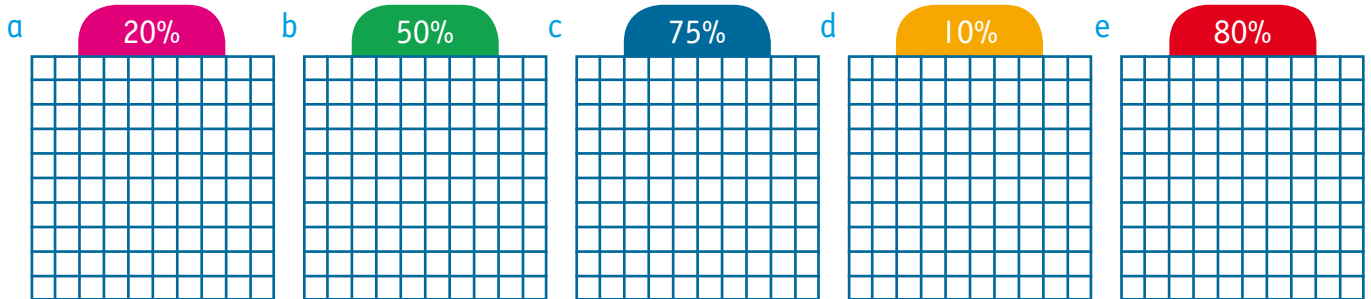
a $\frac{10}{100} = \frac{10\%}{100}$ b $\frac{\quad}{100} = \frac{\quad}{100}$ c $\frac{\quad}{100} = \frac{\quad}{100}$ d $\frac{\quad}{100} = \frac{\quad}{100}$ e $\frac{\quad}{100} = \frac{\quad}{100}$

f $\frac{\quad}{100} = \frac{\quad}{100}$ g $\frac{\quad}{100} = \frac{\quad}{100}$ h $\frac{\quad}{100} = \frac{\quad}{100}$ i $\frac{\quad}{100} = \frac{\quad}{100}$ j $\frac{\quad}{100} = \frac{\quad}{100}$

k $\frac{\quad}{100} = \frac{\quad}{100}$ l $\frac{\quad}{100} = \frac{\quad}{100}$ m $\frac{\quad}{100} = \frac{\quad}{100}$ n $\frac{\quad}{100} = \frac{\quad}{100}$ o $\frac{\quad}{100} = \frac{\quad}{100}$

2 Write the percentages in descending order.

3 Colour to show:



4 Draw lines to match a fraction to its decimal and percentage.

$\frac{1}{2}$	$\frac{1}{10}$	$\frac{4}{10}$	$\frac{9}{10}$	$\frac{25}{100}$	$\frac{30}{100}$
0.10	0.9	0.5	0.4	0.3	0.25
40%	50%	90%	10%	25%	30%

Draw a diagram

Draw diagrams to help you complete these.

$$\frac{1}{5} = \frac{?}{100}$$

$$\frac{1}{4} = \frac{?}{100}$$

$$\frac{1}{20} = \frac{?}{100}$$

$$\frac{7}{10} = \frac{?}{100}$$

$$\frac{3}{4} = \frac{?}{100}$$



Everyday percentages

Percent means
for each 100
35% means $\frac{35}{100}$

Equivalency

1 Fill in the table.

	Percent	Fraction	Fraction in lowest terms	Decimal
a	50%	$\frac{50}{100}$	$\frac{1}{2}$	0.50
b	25%			
c	75%			
d	10%			
e	20%			

Learn these.
They will help you solve problems.



2 Draw to show:

a 50% of an apple.

b 75% of a pizza.

c 10% of a chocolate bar.

3



Colour:

a 10% blue.

b 25% red.

c 50% green.

d 10% yellow.

e How many are not coloured? _____

f What % is this? _____

4 Find:

a 75% of 1 hour = _____ minutes

b 50% of 1 minute = _____ seconds

c 20% of \$30 = _____

d 10% of 1 decade = _____ years

e 25% of 1 dozen = _____

f 75% of 1 year = _____ months

Challenge!

Item	Price	New Price with 50% increase	New Price with 25% increase	New Price with 10% increase
a Shoes	\$35			
b Shirt	\$28			

Percentages all around us



Working with money

Collect some newspapers and magazines and cut out percentage amounts used in advertising. Make a collage of six cut-outs on this page.

Write a brief explanation for each one. eg 8% – this is the amount of interest you will pay each year on your loan from the Bixby Bank.

