PERCENTAGES

Percentages are just a particular type of fraction.
Percentages are fractions where the bottom number is 100
The symbol for percent is %

$\frac{36}{100}$ is written as 36%

$\frac{3}{4} \overset{\times 25}{=} \frac{75}{100}$ so $\frac{3}{4} = 75\%$

The word "per cent" means "out of 100"

Some fractions are so common, it is worth taking a bit of time to learn what they are as percentages.

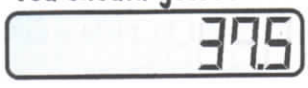
$\frac{1}{2} = 50\%$	$\frac{1}{3} = 33.3\%$	$\frac{1}{4} = 25\%$	$\frac{1}{5} = 20\%$	$\frac{1}{10} = 10\%$
	$\frac{2}{3} = 66.7\%$	$\frac{3}{4} = 75\%$	$\frac{2}{5} = 40\%$	$\frac{3}{10} = 30\%$
			$\frac{3}{5} = 60\%$	$\frac{7}{10} = 70\%$
			$\frac{4}{5} = 80\%$	$\frac{9}{10} = 90\%$

It is much easier to compare percentages than fractions.
It is not obvious whether $\frac{3}{5}$ is bigger or smaller than $\frac{2}{3}$, but 60% is clearly smaller than 66.7%.

If we use a calculator, a fraction can be changed into a percentage like this:

For $\frac{3}{8}$ press: 3 ÷ 8 X 1 0 0 =

You should get...



$\frac{3}{8} = 37.5\%$

Always do TOP NUMBER ÷ BOTTOM NUMBER x 100 = PERCENTAGE

43 What are these fractions as percentages ?

a) $\frac{5}{8}$ b) $\frac{7}{20}$

c) $\frac{8}{25}$ d) $\frac{23}{40}$

44 Which is the biggest increase?

a)

b)