Maths Block 3

FRACTIONS → DECIMALS
PERCENTAGES

Percent = out of 100!

Converting Fractions / Decimals/Percentages

Fraction		Decimal		Percent
¾	Divide numerator by denominator ($3 \div 4 = 0.75$)	0.75	Multiply by 100 ($0.75 \times 100 = 75\%$)	75%

75 is numerator; use place value of last digit as denominator 75/100
Simplify

Divide by 100 ($75 \div 100 = 0.75$)

Percentage Bubbles help you to work out any percentage

100%	10%	1%
300	30	3

÷ 10   ÷ 1

50%	5%
150	15

÷ 2   ÷ 2
÷ 10

25%
75
÷ 2

60% =
50% + 10%
150 + 30 = 180

Percentage Increase /Decrease

Increase
140 by 12%

Find 12% of 140

12% 0f 140 is 21 is 21

Add it to the original value

Decrease
140 by 12%

Find 12% of 140

12% 0f 140 is 21

Subtract from original value

140+21=161   140-21=119

Express one value as a percentage of another

What is 35 as a percentage of 900?
1.
Divide the first value by the total value
35 ÷900 $\frac{35}{900}$
2.
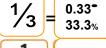Multiply by 100 (per cent)
$\frac{35}{900}$ X 100 = 3.9% (to 1 decimal place)

What is 12 as a percentage of 120?

$\frac{12}{120}$ = $\frac{1}{10}$ x 100=10%
(simplify)

Learn these Fractions Decimals & %

$\frac{3}{4}$ =	0.75 75%
$\frac{1}{3}$ =	0.33˙ 33.3%
$\frac{1}{4}$ =	0.25 25%
$\frac{1}{5}$ =	0.2 20%
$\frac{1}{8}$ =	0.125 12.5%

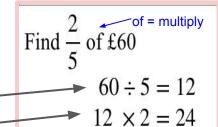## Percent - Calculator

Convert your percentage to a decimal to get a multiplier

12% of 630
12 ÷ 100 = 0.12
Multiply by this decimal
630 x 0.12 = 75.6

Fraction of an Amount

Divide by the denominator
Multiply by the numerator

Find $\frac{2}{5}$ of £60   of = multiply

$60 \div 5 = 12$
$12 \times 2 = 24$

Decimal Place Value

679.32815

100 10 1 $\frac{1}{10}$ $\frac{1}{100}$ $\frac{1}{1000}$ $\frac{1}{10,000}$ $\frac{1}{100,000}$

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