

Fractions, decimals and percentages



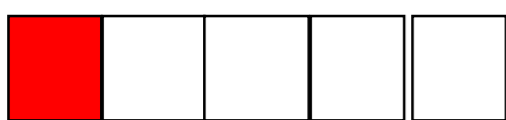
$$\frac{1}{2} = 50\% \quad 0.50$$



$$\frac{1}{3} = 33.33\% \quad 0.33$$



$$\frac{1}{4} = 25\% \quad 0.25$$



$$\frac{1}{5} = 20\% \quad 0.20$$



$$\frac{1}{8} = 12.5\% \quad 0.125$$



$$\frac{1}{10} = 10\% \quad 0.10$$

Measurement facts

$1 \text{ cm} = 10\text{mm}$

$1 \text{ litre} = 1000\text{ml}$

$1\text{m} = 100\text{cm}$

$1\text{kg} = 1000\text{g}$

$1\text{km} = 1000\text{m}$

$1 \text{ tonne} = 1000\text{kg}$

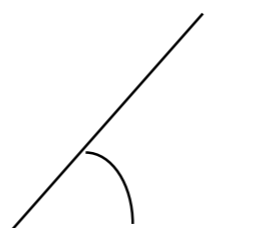
$5\text{km} = 3.1 \text{ miles}$

$5 \text{ miles} = 8\text{km}$

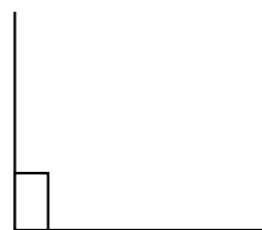
Revision Mat

Angles

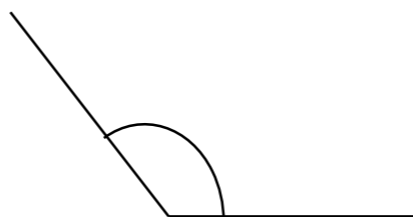
Acute angle - Less than 90 degrees



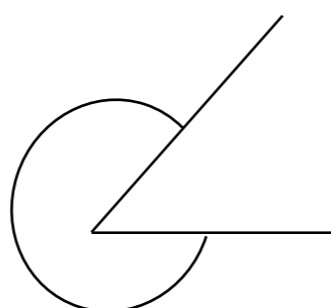
Right angle - 90 degrees



Obtuse angle - Bigger than 90 degrees but less than 180 degrees



Reflex angle - Bigger than 180 degrees but less than 360 degrees



Averages

Mean - Add all the numbers up and divide by the total amount of numbers you have.

Mode - The number that appears the most time. This can be more than one number appearing the same amount of times.

Range - Subtract the smallest number from the biggest number.

Median - The number in the middle when numbers are put in order from biggest to smallest.

Order of Operations

Brackets

Indices

Division

and

Multiplication

Addition

and

Subtraction

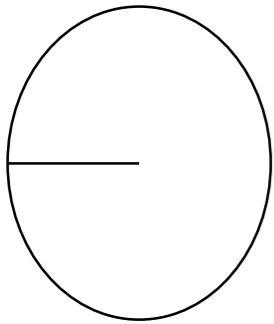
B
I
D
M
A
S

B
I
D
M
A
S

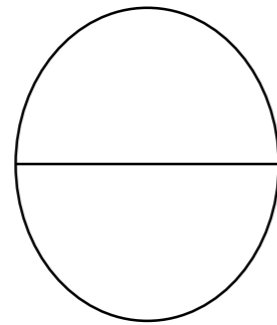
Revision Mat

Circles

Radius - Measure half of the circle from the centre to the outer edge.



Diameter - Measure the length from one side to the other.



Circumference = Diameter $\times \pi$ (3.14)
Circumference = Radius $\times 2 \times \pi$ (3.14)

Perimeter = Add all the sides together

Area of a quadrilateral = Length \times width

Area of a triangle = Base \times height $\div 2$

Volume = Length \times width \times height

Fractions

Adding and subtracting fractions:
When the denominator is the same, calculate using the numerators
e.g. $\frac{3}{5} + \frac{4}{5} = \frac{7}{5}$

Multiplying fractions together:
Multiply the numerators together and the denominators together
e.g. $\frac{2}{3} \times \frac{4}{5} = \frac{8}{15}$

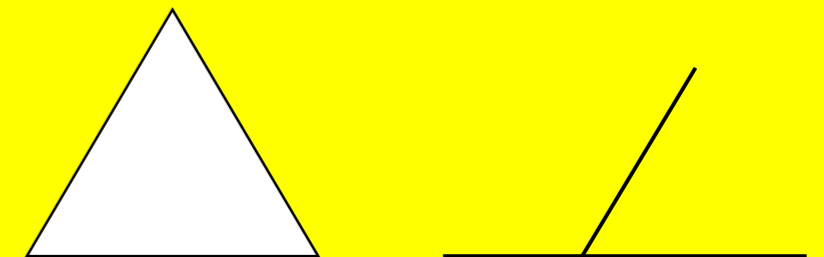
Multiplying a fraction by a whole number:
Multiply the numerator by the whole number
e.g. $\frac{2}{3} \times 5 = \frac{10}{3}$

Dividing fractions by a whole number:
Multiply the denominator by the dividing number
e.g. $\frac{2}{3} \div 5 = \frac{2}{15}$

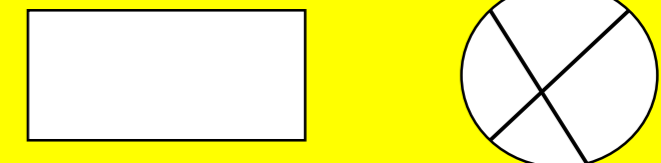
Roman Numerals

Symbol	Value
I	1
V	5
X	10
L	50
C	100
D	500
M	1000

Angles



Angles within a triangle or on a straight line total 180 degrees.



Angles within a quadrilateral or around a point total 360 degrees.

Factors - Factors divide into a number exactly e.g. The factors of 10 are 1, 2, 5, and 10.

Prime Numbers - A number that is only divisible by itself and 1

Multiples - A number in the times table e.g. multiples of 4 are 8, 12, 16

Square numbers - When you multiply a number by itself
e.g. $5^2 = 5 \times 5 = 25$

Cubed numbers - When you multiply a number by itself 3 times
e.g. $5^3 = 5 \times 5 \times 5 = 125$