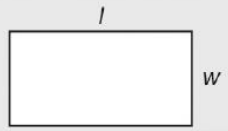
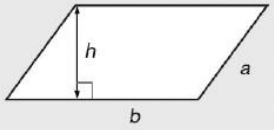
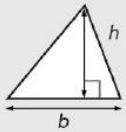
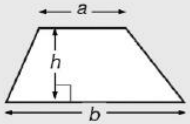
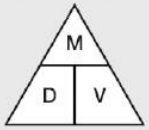
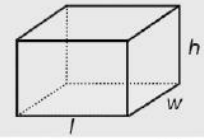
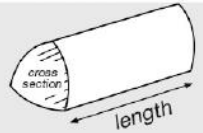
Areas

Rectangle = $l \times w$	
Parallelogram = $b \times h$	
Triangle = $\frac{1}{2} b \times h$	
Trapezium = $\frac{1}{2}(a + b)h$	

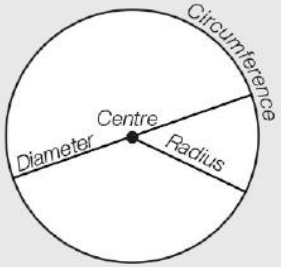
Compound measures

Speed speed = $\frac{\text{distance}}{\text{time}}$	
Density density = $\frac{\text{mass}}{\text{volume}}$	

Volumes

Cuboid = $l \times w \times h$	
Prism = area of cross section × length	
Cylinder = $\pi r^2 h$	

Circles

Circumference = $\pi \times$ diameter, $C = \pi d$	
Circumference = $2 \times \pi \times$ radius, $C = 2\pi r$	
Area of a circle = π x radius squared, $A = \pi r^2$	

Memory list to secure a strong pass in mathematics

Angles in parallel lines

Alternate angles are equal (Z angles)

Corresponding angles are equal (F angles)

Allied angles add to 180^0 (C angles)

Index Laws

$a^n \times a^m = a^{n+m}$

$a^n \div a^m = a^{n-m}$

$(a^n)^m = a^{n \times m}$

Straight line graphs

$$y = mx + c$$

m is the gradient of the graph

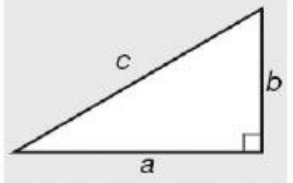
c is the y-intercept (where the line crosses the y axis)

Gradient= change in y / change in x

Right Angled Triangles

Pythagoras' Theorem

For a right-angled triangle, $a^2 + b^2 = c^2$



Trigonometric ratios (*new to F*)

$\sin x^\circ = \frac{\text{opp}}{\text{hyp}}$, $\cos x^\circ = \frac{\text{adj}}{\text{hyp}}$, $\tan x^\circ = \frac{\text{opp}}{\text{adj}}$