GCSE Maths formula cheat sheet

Shapes

Areas	
Area of a rectangle	$A = width\ (w) \times length\ (l)$
Area of a triangle	$A = \frac{1}{2} \times base\ (b) \times height\ (h)$
Area of a parallelogram	$A = base\ (b) \times height\ (h)$
Area of a circle	$A = \pi r^2$
Volumes	
Volume of a cube(oid)	$V = width\ (w) \times height\ (h) \times length\ (l)$
Volume of a sphere	$v = \frac{4}{3}\pi r^3$
Volume of a cone	$V = \pi r^2 \frac{h}{3}$
Volume of a pyramid	$V = \frac{lwh}{3}$
Surface areas	
Surface area of a sphere	$A = 4\pi r^2$
Curved surface area of a cone	$A = \pi r l$
Curved surface area of a cylinder	$A = 2\pi r h$
Circumference and Perimeter	
Perimeter of a rectangle	$P = 2(l+w)$
Circumference of a circle	$C = 2\pi r$
Pythagoras	$a^2 + b^2 = c^2$

Angles

Rule of Sines	$\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{s}{\sin C}$
Cosine rule	$a^2 = b^2 + c^2 - 2bc \cos A$
Area of a triangle using an angle	$A = \frac{1}{2} ab \sin C$

Quadratics

Quadratic equation	$x = \frac{-b +- \sqrt{b^2 - 4ac}}{2a}$