FORMULA SHEET

IMPORTANT SYMBOLS

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
g	Centre of gravity	h	Height	d	Diameter
c	Centroid	b	Breadth/Width	r	Radius
ℓ	Length	s	Side	A	Area
π	Pi = $\dfrac{22}{7}$ = 3,142	Ø	Diameter	V	Volume

FORMULAE

AREA OF	FORMULA (in words)	FORMULA (in symbols)	FORMULA FOR THE POSITION OF CENTROIDS	
			X-axis	Y-axis
Square	side x side	s x s	$\dfrac{s}{2}$	$\dfrac{s}{2}$
Rectangle	length x breadth	ℓ x b	$\dfrac{\ell}{2}$	$\dfrac{b}{2}$
Right-angled triangle	½ x base x height	½b x h	$\dfrac{b}{3}$	$\dfrac{h}{3}$
Equilateral triangle/ Pyramid	½ x base x height	½b x h	$\dfrac{b}{2}$	$\dfrac{h}{3}$
Circle	π x radius x radius	πr^2		
Circle	π x diameter x diameter divided by 4	$\dfrac{\pi d^2}{4}$	Centroid is in the centre	
Semi-circle	π x radius x radius divided by 2	$\dfrac{\pi r^2}{2}$	Centroid is 0,424r on the centre line	

$$\text{Position of centroid} = \frac{(A1 \times d) \pm (A2 \times d)}{\text{Total area}}$$

OR

$$X = \frac{\Sigma Ax}{\Sigma A} \quad \textbf{OR} \quad Y = \frac{\Sigma Ay}{\Sigma A}$$