

### 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

#### FORMULAE

AREA OF	FORMULA (in words)	FORMULA (in symbols)	FORMULA FOR THE POSITION OF CENTROIDS	
			X-axis	Y-axis
Square	side × side	s × s	$\frac{s}{2}$	$\frac{s}{2}$
Rectangle	length × breadth	ℓ × b	$\frac{\ell}{2}$	$\frac{b}{2}$
Right-angled triangle	$\frac{1}{2}$ × base × height	$\frac{1}{2}$ b × h	$\frac{b}{3}$	$\frac{h}{3}$
Equilateral triangle/ Isosceles triangle	$\frac{1}{2}$ × base × height	$\frac{1}{2}$ b × h	$\frac{b}{2}$	$\frac{h}{3}$

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

**OR**

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