

## FORMULA SHEET

### IMPORTANT SYMBOLS

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
<i>g</i>	Centre of gravity	<i>h</i>	Height	<i>d</i>	Diameter
<i>c</i>	Centroid	<i>b</i>	Breadth/Width	<i>r</i>	Radius
<i>l</i>	Length	<i>s</i>	Side	<i>A</i>	Area

### FORMULAE

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

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

**OR**

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