

# ADVANCED GEOMETRY: AREA REFERENCE

VISUAL	POLYGON/SHAPE	STANDARD FORMULA	VARIABLE KEY
Circle	<b>Circle</b>	$A = \pi r^2$	r = radius
Triangle	<b>Triangle</b>	$A = \frac{1}{2}bh$	b = base, h = height
Para	<b>Parallelogram</b>	$A = bh$	b = base, h = height
Trap	<b>Trapezoid</b>	$A = \frac{1}{2}(a+b)h$	a,b = parallel sides
Rhomb	<b>Rhombus</b>	$A = \frac{1}{2}(d_1d_2)$	d = diagonals
Poly	<b>Regular Polygon</b>	$A = \frac{1}{2}ap$	a = apothem, p = perimeter
Ellipse	<b>Ellipse</b>	$A = \pi ab$	a,b = semi-axes

*\* All measurements must be in the same units before calculation. Area results are expressed in square units ( $u^2$ ).*