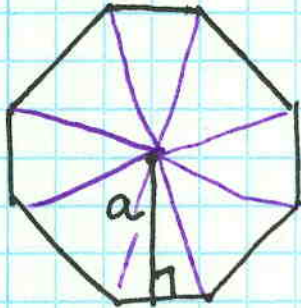


10 - Area of Polygons

Area of a Regular Polygon Equilateral



Regular Octagon

a = apothem (n of Δ)

s = side length (b of Δ)

n = # of sides (# of Δ)

Area of triangles
multiplied by
number of triangles

$$A = \frac{1}{2} b h n \quad \text{(building formula)}$$

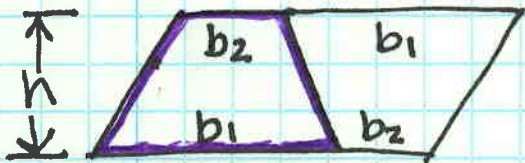
$$A = \frac{1}{2} s a n \quad *$$

$$A = \frac{1}{2} P a \quad *$$

$sn = P$ = perimeter

Area of Trapezoids

A quadrilateral with exactly
2 parallel sides.



a trapezoid is
half of a parallelogram

h \rightarrow height \rightarrow perpendicular distance
between the 2 bases

$$A_{\text{trap}} = \frac{1}{2} (b_1 + b_2) h$$