GEOMETRY – AREAS FOR 2 DIMENSIONAL SHAPES

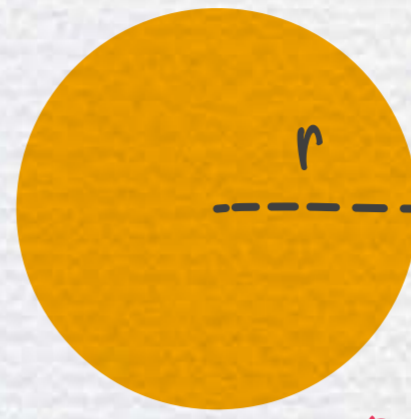## SQUARE

a

a

$$Area = a^2$$

RECTANGLE

a

b

$$Area = a \times b$$

CIRCLE

$\pi = 22/7$

r

$$Area = \pi r^2$$

ELLIPSE

$r2$

$r1$
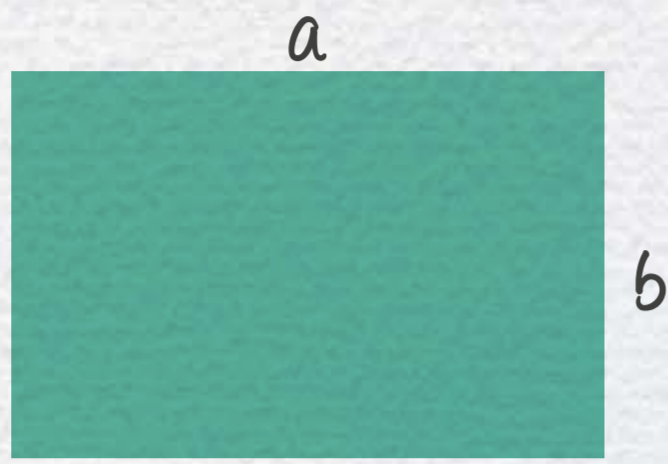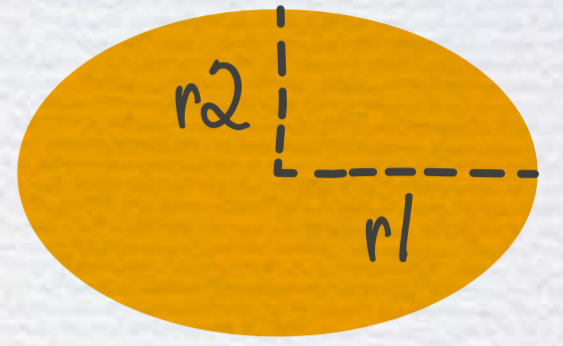
$$Area = \pi \times r1 \times r2$$

EQUILATERAL TRIANGLE

a a

h

a
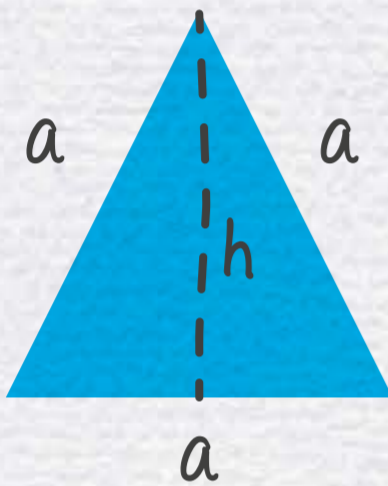
$$Area = \sqrt{3}/4 \times a^2$$

RIGHT ANGLE TRIANGLE

h

b
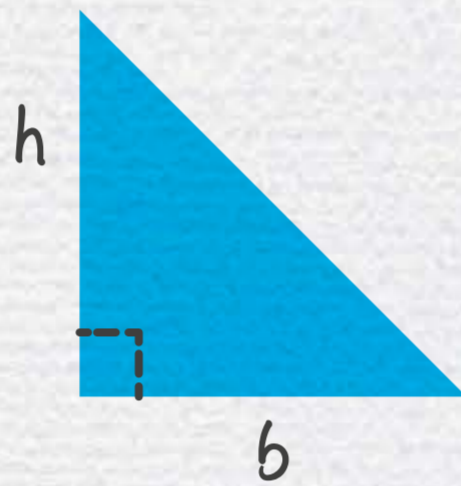
$$Area = 1/2\,(b \times h)$$

OBTUSE ANGLE TRIANGLE

h

b
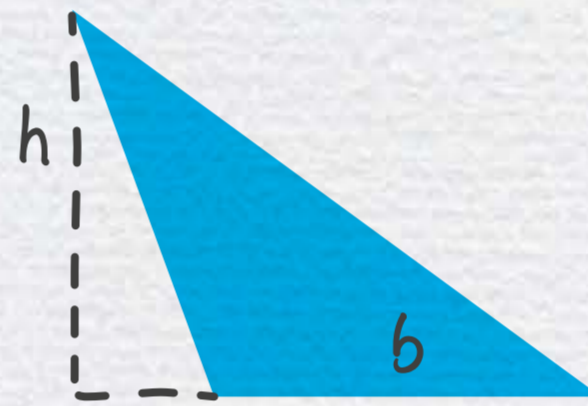
$$Area = 1/2\,(b \times h)$$

ISOSCELES TRIANGLE

a a

h

b

$$Area = 1/2\,(b \times h)$$
$$= 1/2 \times a \times b \sin c$$

TRAPEZIUM

a

h

b
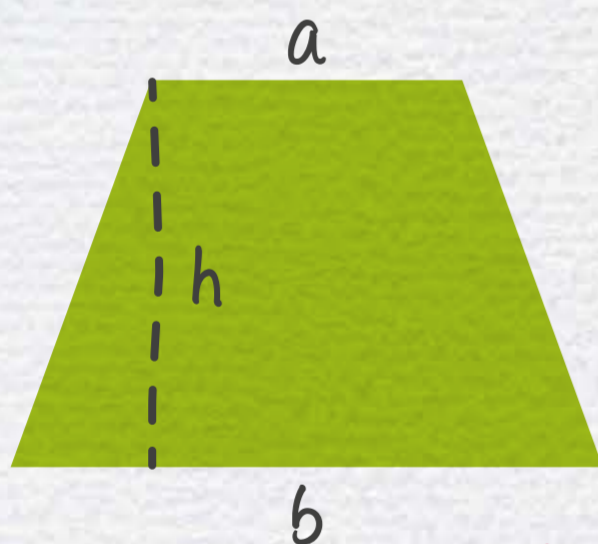
$$Area = 1/2\,(a + b) \times h$$

RHOMBUS

$d1$

$d2$
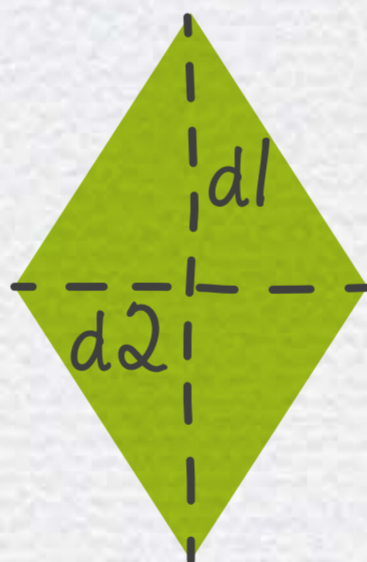
$$Area = 1/2 \times d1 \times d2$$

PARALLELOGRAM

h

b
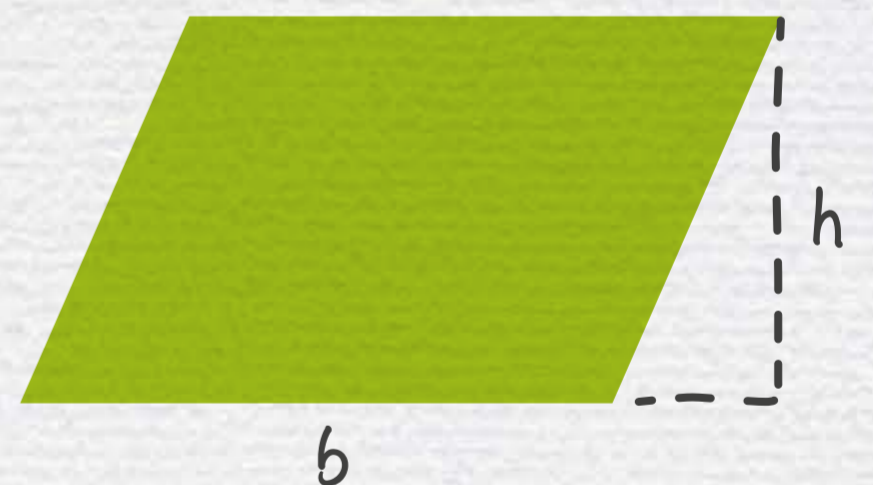
$$Area = b \times h$$

SCALENE TRIANGLE: LENGTH A, B, C

a

c

b
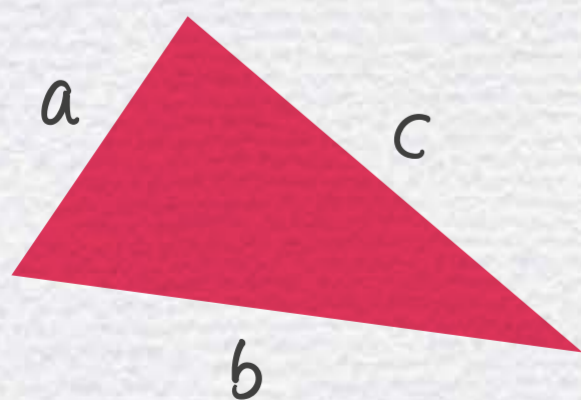
$$Area = \sqrt{s\,(s-a)(s-b)(s-c)}$$
$$Where\ s = 1/2\,(a+b+c)$$

REGULAR N-GON

s s

s a

s
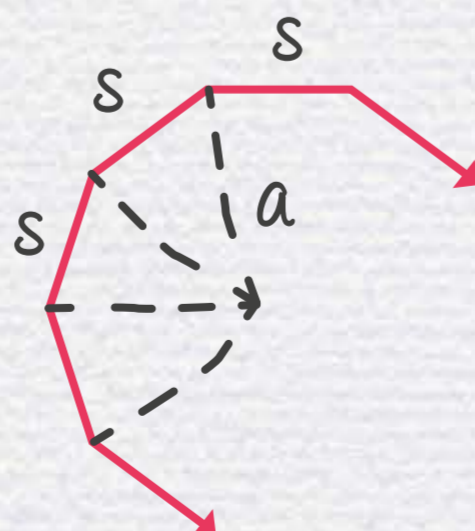
n = number of sides

a = length from centre to corner

$$Area = (1/2)\,n \sin (360/n)\, a^2$$