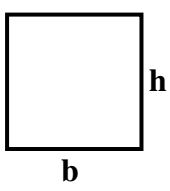
Geometry Note-Taking Guide **Name:**_____

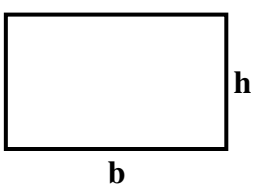
Period:____

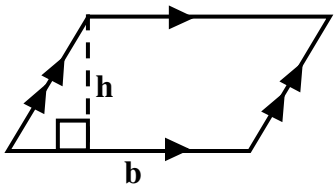
Section 10.1– Areas of Parallelograms, Triangles, Trapezoids, and Kites

Area of a Square, Rectangle, and Parallelogram

Formula: A = bh

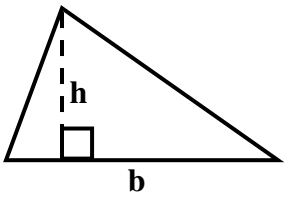


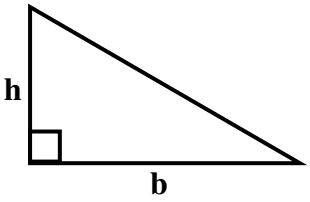


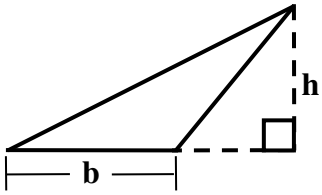


Area of a Triangle

Formula: A = $\frac{1}{2}$bh





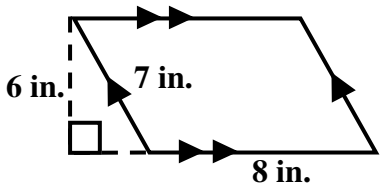


Important: The base and height of any polygon are always perpendicular.

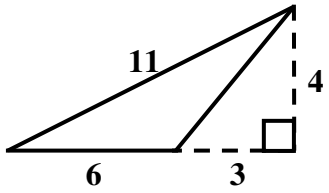
Ex 1:

Find the perimeter and area of the polygon.

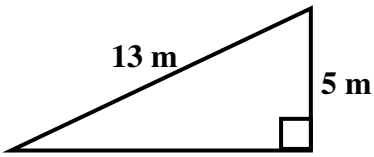
a)



b)



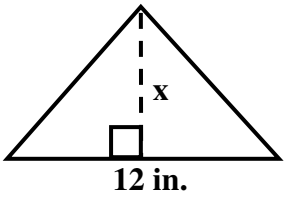
c)



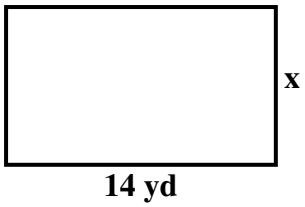
Ex 2:

Find the value of x using the given information.

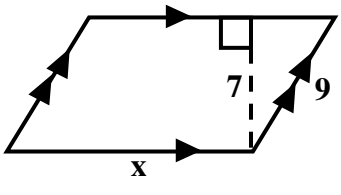
a) A = 36 in.^{2}



b) P = 44 yd

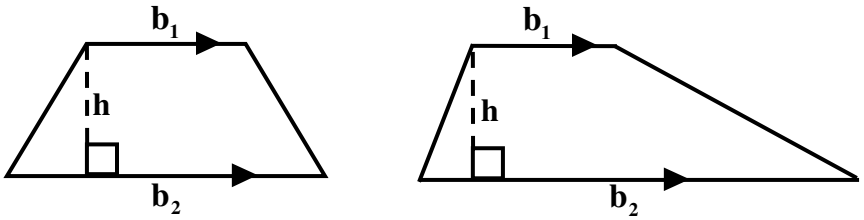


c) A = 84 units^2



Area of a Trapezoid

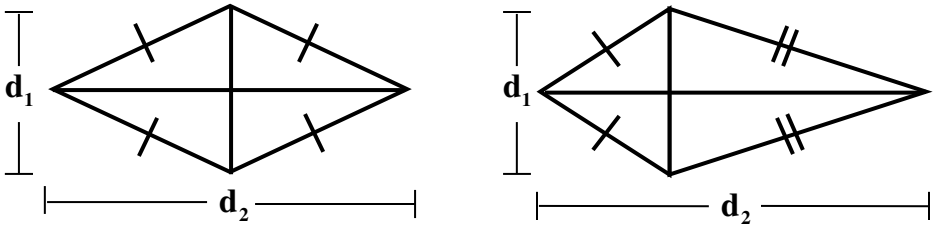
Formula: $A = \frac{1}{2}h(b_1 + b_2)$



Area of a Rhombus and Kite

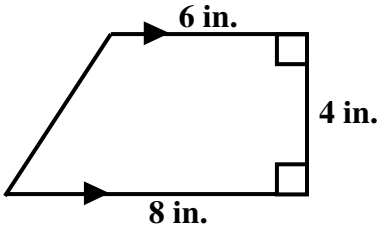
Formula: $A = \frac{1}{2}d_1d_2$

Note: d means diagonal

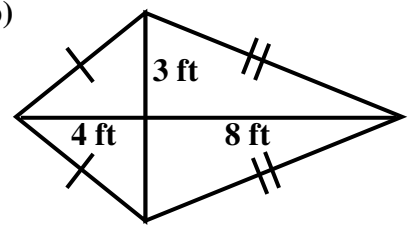


Ex 3:
Find the area of the figure.

a)

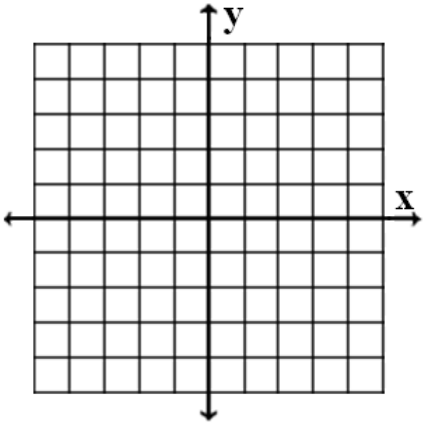


b)



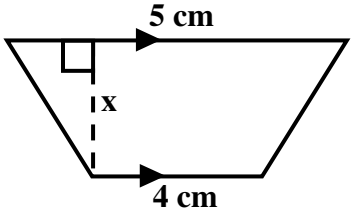
c) Graph the points that form a polygon and find its area.

(–4, 1), (–1, 3), (2, 1), (–1, –1)

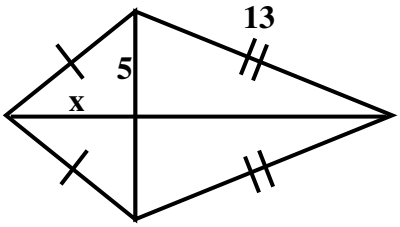


Ex 4:
Find the value of x using the given information.

a) $A = 36\,cm^2$



b) $A = 170\,units^2$



c) $A = 360\,units^2$