Name: Key

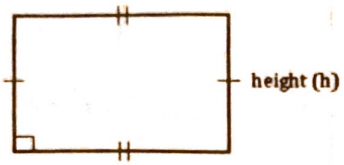
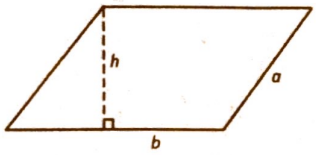
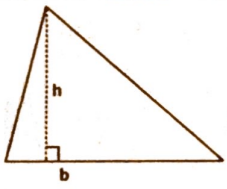
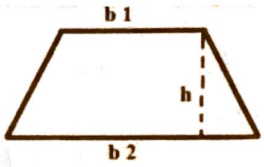
Date: _____

7R

Classwork 11.5

Area of Polygons

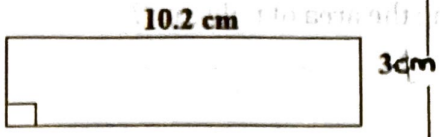
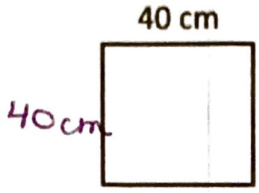
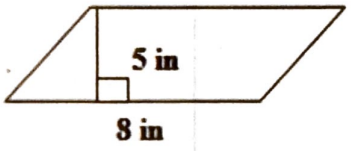
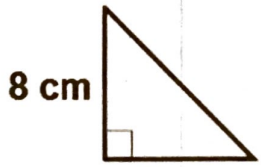
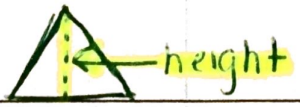
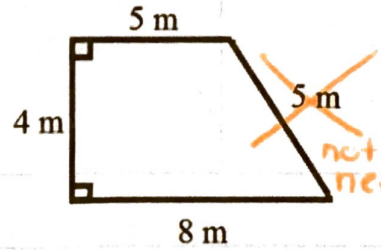
Aim: What do you remember about finding the area of polygons?

Figure	Formula Write the formula given in the BrainPOP.
Rectangle or Square 	$A = b \cdot h$
Parallelogram 	$A = b \cdot h$
Triangle 	$A = \frac{1}{2} b \cdot h$
Trapezoid 	$A = \frac{1}{2} h(a+b)$

Parallel: 2 or more lines that will never intersect (cross) symbol: //

Perpendicular: When 2 lines come together to form a right angle symbol: ⊥

Try It: Find the area of the figures below. ***Show your work!***

FORMULA	FIGURE	FINDING THE AREA
Rectangle $A = lw$ or $A = bh$		$A = lw$ $A = (10.2)(3)$ $A = 30.6\ cm^2$
Square $A = lw$ or $A = bh$	 * all sides are $\cong$	$A = lw$ $A = (40)(40)$ $A = 1600\ cm^2$
Parallelogram $A = bh$ ↑ ⊥ to base	 **Notice:** Height is vertical not slanted.	$A = bh$ $A = (8)(5)$ $A = 40\ in^2$
Triangle $A = \frac{1}{2}bh$ ↑ ⊥ to base	 	$A = \frac{1}{2}bh$ $A = \frac{1}{2}(5)(8)$ $A = 20\ cm^2$
Trapezoid $A = \frac{1}{2}h(b_1 + b_2)$ ↑ ⊥ to base	 **Notice:** Height is vertical not slanted.	$A = \frac{1}{2}h(b_1 + b_2)$ $A = \frac{1}{2}(4)(5+8)$ $A = 26\ m^2$