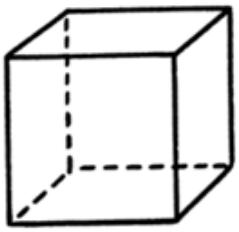
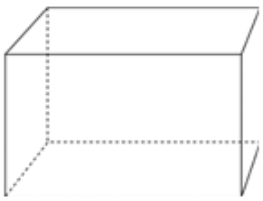
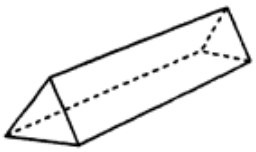
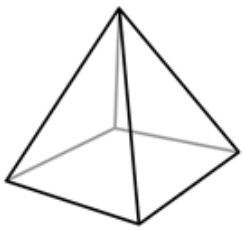
Name_____

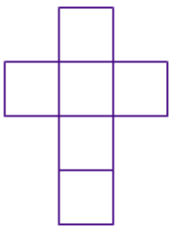
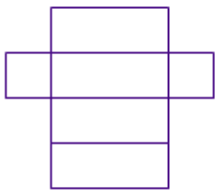
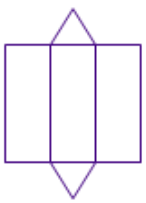
Study Guide

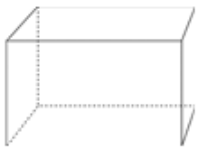
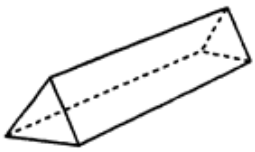
Perimeter: the distance around the edges of a two-dimensional figure	Example: 5.7in 3.5in 3.5 + 5.7 + 3.5 + 5.7 = 18.4 in.
Area of a rectangle: the space on the inside of a rectangle formula: length x width	Example: $4\frac{1}{4}$ in. $2\frac{1}{2}$ in. $2\frac{1}{2} \times 4\frac{1}{4} = \frac{5}{2} \times \frac{17}{4} = \frac{85}{8} = 10\frac{5}{8}$ in²
Area of a triangle: base x height ÷ 2 $\frac{bh}{2}$	5 in. 8 in. 5 x 8 = 40 ÷ 2 = 20 in²

Solid Figures

Cube	Rectangular Prism	Triangular Prism	Pyramid
			

Draw the net for the above figures.

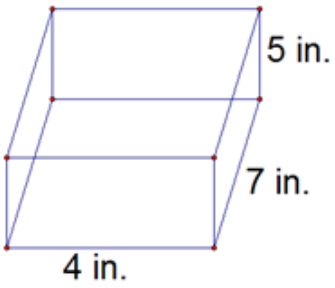
			

		
Faces 2d shapes that make a 3d figure	6	5
Edges line where two faces meet	12	9
Vertices corners	8	6

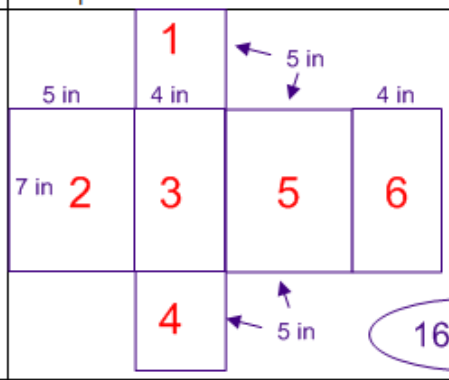
How to Find Surface Area

Find the area of all of the face and add them together.

Surface Area of a Rectangular Prism:



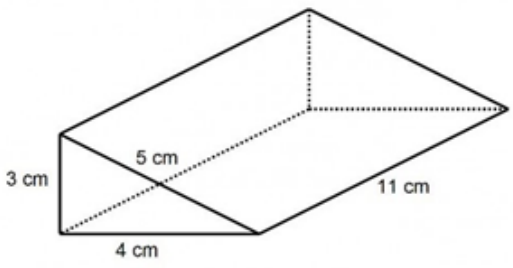
Example



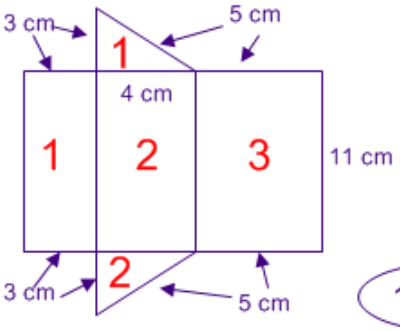
$R_1 = 5 \times 4 = 20$
$R_2 = 7 \times 5 = 35$
$R_3 = 4 \times 7 = 28$
$R_4 = 5 \times 4 = 20$
$R_5 = 7 \times 5 = 35$
$R_6 = 4 \times 7 = 28$
168

168 in.^2

Surface Area of a Triangular Prism:



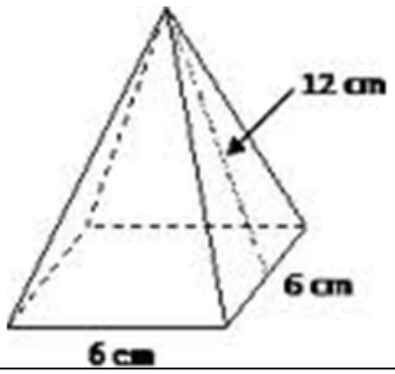
Example



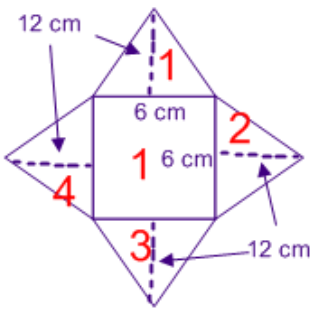
$R_1 = 3 \times 11 = 33$
$R_2 = 4 \times 11 = 44$
$R_3 = 5 \times 11 = 55$
$T_1 = 3 \times 4 \div 2 = 6$
$T_2 = 3 \times 4 \div 2 = 6$
144

144 cm.^2

Surface Area of a Pyramid:

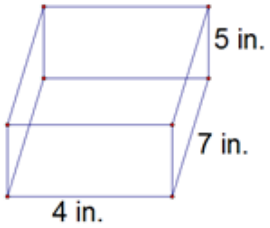
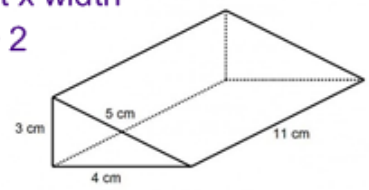
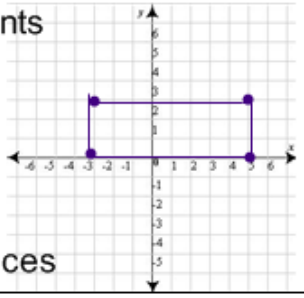
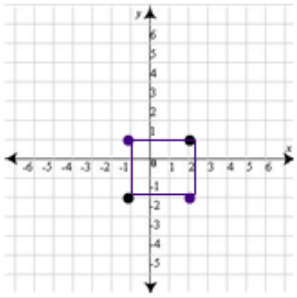


Example



$Sq = 6 \times 6 = 36$
$T_1 = 6 \times 12 \div 2 = 36$
$T_2 = 6 \times 12 \div 2 = 36$
$T_3 = 6 \times 12 \div 2 = 36$
$T_4 = 6 \times 12 \div 2 = 36$
180

180 cm.^2

Volume of a Rectangular Prism:	Example
length x width x height l x w x h  	$4 \times 7 \times 5 = 140 \text{ in}^3$
Volume of a Triangular Prism:	**Example**
base x height x width b x h x w ÷ 2  	$3 \times 4 \times 11 = 132 \div 2 = 66 \text{ cm}^3$
Graphing Shapes	**Describe the shape you graphed.**
Graph these points (-3, 3) (-3, 0) (5, 0) (5, 3)  Connect the vertices	Four right angles 2 pairs of equal sides It's a rectangle.
Finding Missing Vertices of Shapes	
What two points are needed to complete the square to the right? Squares need all four sides same length, so if those are 3 apart vertically and horizontally, the other two points would be: (-1, 1) and (2, -2)	
Reflection : Flip mirrored across a line	
Rotation : Turn turned on a certain point, two images should share a point	
Translation : Slide move striaght in one direction	

My student was able to study for AT LEAST 30 minutes for this test.

Parent signature_____Date_____