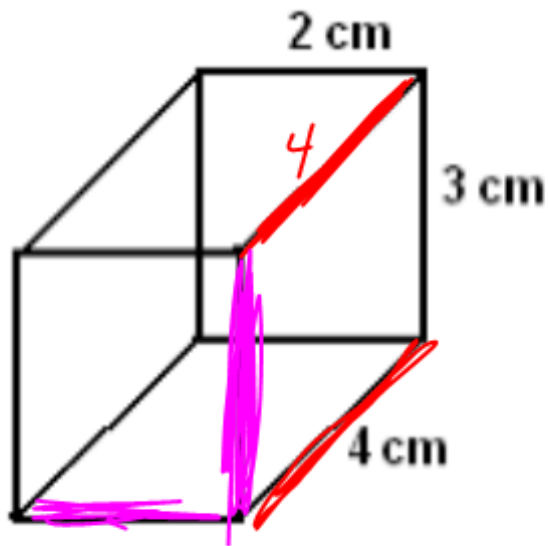


- 1.) **Polyhedron** A 3D figure with flat faces and straight edges.
- 2.) **Net** A 2D "blueprint" for a 3D figure.
- 3.) **Face** A side of a 3D figure.
- 4.) **Edge** Where faces intersect in a 3D figure.
- 5.) **Vertex** Where edges intersect in a 3D figure.
- 6.) **Surface Area** The combined areas of the faces

[EX 1] Rectangular Prism



$$\text{Top / Bottom} = 2 [2(4)]$$

$$= 16$$

$$\text{Left / Right} = 2 [3(4)]$$

$$= 24$$

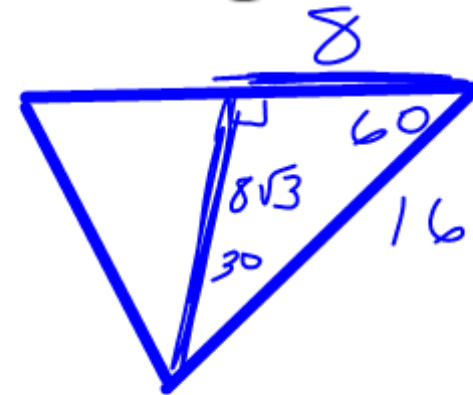
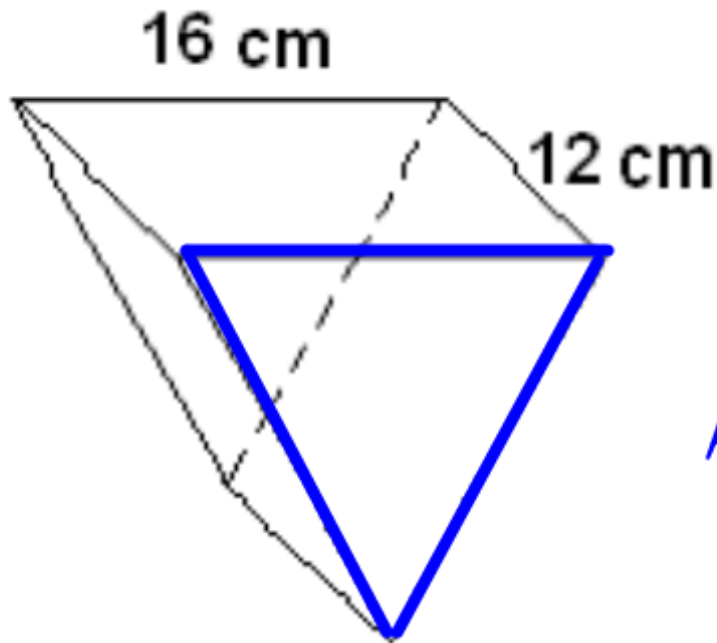
$$\text{Front / Back} = 2 [2(3)]$$

$$= 12$$

$$SA = 16 + 24 + 12 = \boxed{52 \text{ cm}^2}$$

[EX 2]

Equilateral Triangle and Rectangles



$$A_{\Delta S} = 2 \left[\frac{(16)(8\sqrt{3})}{2} \right]$$

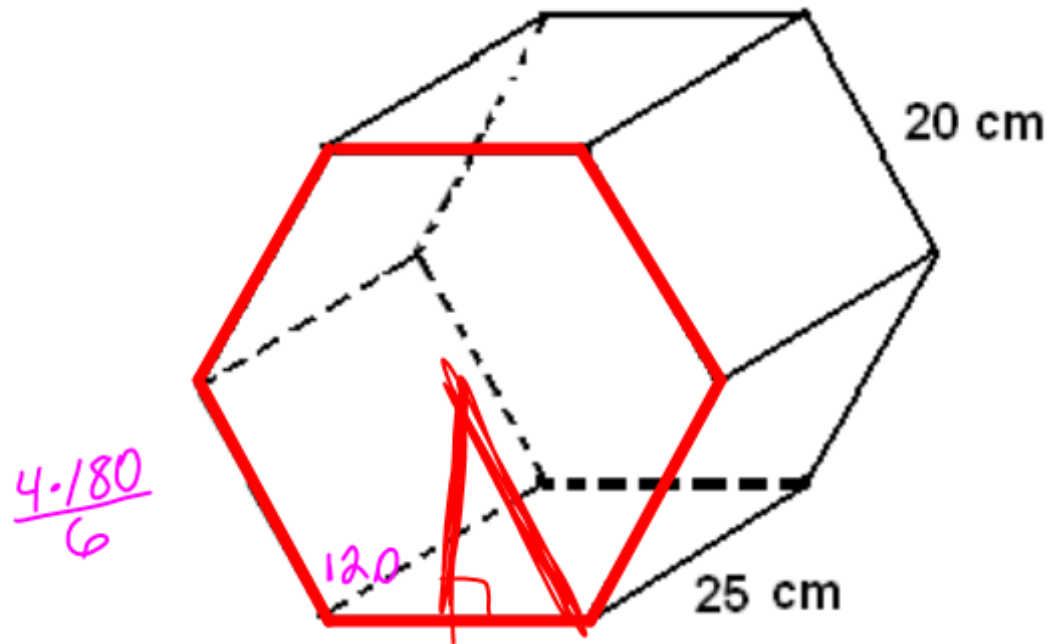
$$\rightarrow A_{\Delta S} = 221.7$$

$$A_{\text{rect}} = 3 [16(12)] = 576$$

$$SA = 221.7 + 576 = 797.7 \text{ cm}^2$$

[EX 3]

Regular Hexagon and Rectangles



$$\frac{4 \cdot 180}{6}$$



$$\tan 60 = \frac{x}{10}$$

$$SA = 2078.46 + 3000$$

$$= 5078.46 \text{ cm}^2$$

$$A_{\text{hex}} = 2 \left[\frac{1}{2} a s n \right]$$

$$= (10\sqrt{3})(20)(6)$$

$$= \underline{\underline{2078.46}}$$

$$A_{\text{rect}} = 6 [25(20)]$$

$$= 3000$$