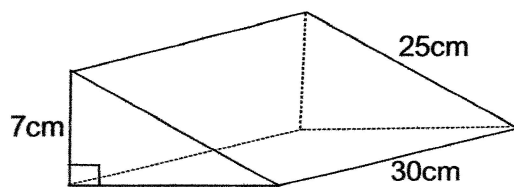


Bellwork Geo Wednesday, May 20, 2020

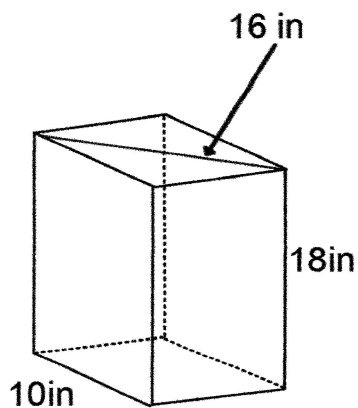
Find the surface area of each. Round to the nearest hundredth as necessary.

1. Right Triangular Prism



SA =

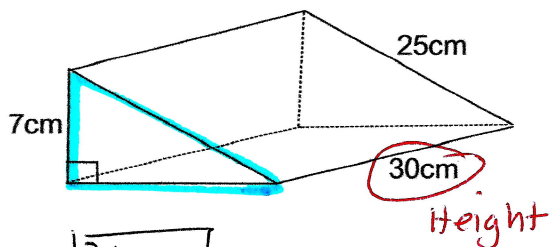
2. Rhomboidal Prism.



SA =

Find the surface area of each. Round to the nearest hundredth as necessary.

1. Right Triangular Prism



BASE:

7 25

x

$$x^2 + 7^2 = 25^2$$

$$\sqrt{x^2} = \sqrt{25^2 - 7^2}$$

$$x = 24$$

perimeter of the Base:

$$P = 7 + 25 + 24 = 56$$

Area of the Base:

$$B = \frac{1}{2}(24)(7) = 84$$

$$SA = 1680 + 168 = 1848 \text{ cm}^2$$

$$LA = (\text{perimeter of Base})(\text{height})$$

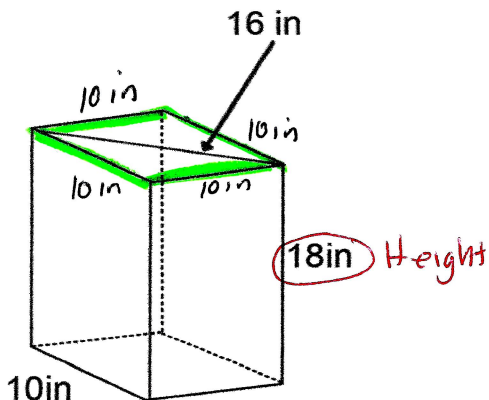
$$= (56)(30)$$

$$LA = 1680 \text{ cm}^2$$

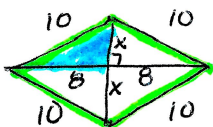
$$2B = 2(84)$$

$$2B = 168 \text{ cm}^2$$

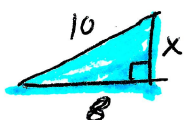
2. Rhomboidal Prism.



BASE:



- one diagonal = 16
- other diag = $2x = 2(6) = 12$



$$x^2 + 8^2 = 10^2$$

$$\sqrt{x^2} = \sqrt{10^2 - 8^2}$$

$$x = 6$$

Perimeter of the Base:

$$P = 4(10) = 40$$

Area of the Base:

$$B = A = \frac{1}{2}d \cdot d$$

$$= \frac{1}{2}(16)(12) = 96$$

$$SA = 720 + 192 = 912 \text{ in}^2$$

$$LA = (\text{perimeter of Base})(\text{height})$$

$$= (40)(18)$$

$$LA = 720 \text{ in}^2$$

$$2B = 2(96)$$

$$2B = 192 \text{ in}^2$$