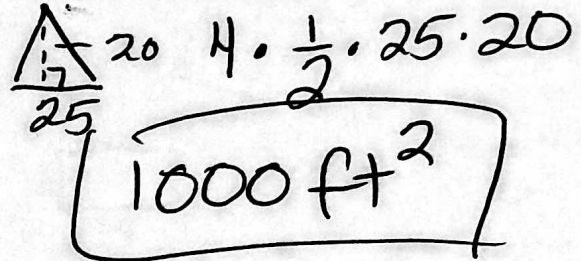


SA Key

Name the cross section formed for each.

1. a plane intersecting a cylinder perpendicular to the base. **rectangle**
2. a plane intersecting a square pyramid parallel to the base. **square**
3. a plane intersecting a triangular prism perpendicular to the base. **rectangle**
4. a plane intersecting a cone parallel to the base. **circle**

16. A square pyramid needs to be painted on all sides except the base. It's triangular sides are 20 feet tall and 25 feet wide at the base, how many square feet need to be painted?

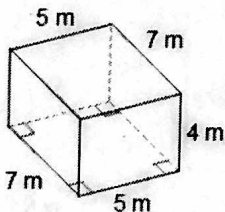


Nov 3-10:50 AM

Mar 11-10:47 AM

SA

Find the surface area.

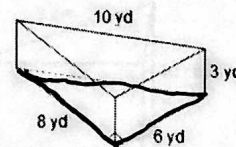


$l = 7$   
 $w = 5$   
 $h = 4$

$2 \cdot 7 \cdot 5 + 2 \cdot 7 \cdot 4 + 2 \cdot 5 \cdot 4$   
 $70 + 56 + 40$   
 $166 \text{ m}^2$

Feb 28-5:33 PM

SA

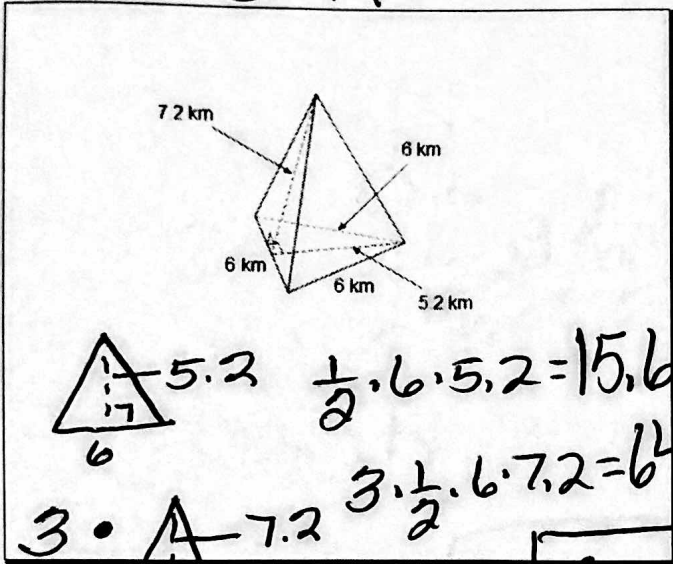


$2 \cdot \frac{1}{2} \cdot 8 \cdot 6 = 48$   
 $3 \cdot 6 = 18$   
 $3 \cdot 8 = 24$   
 $3 \cdot 10 = 36$

$120 \text{ yd}^2$

Feb 28-5:36 PM

SA



$$\frac{1}{2} \cdot 6 \cdot 5.2 = 15.6$$

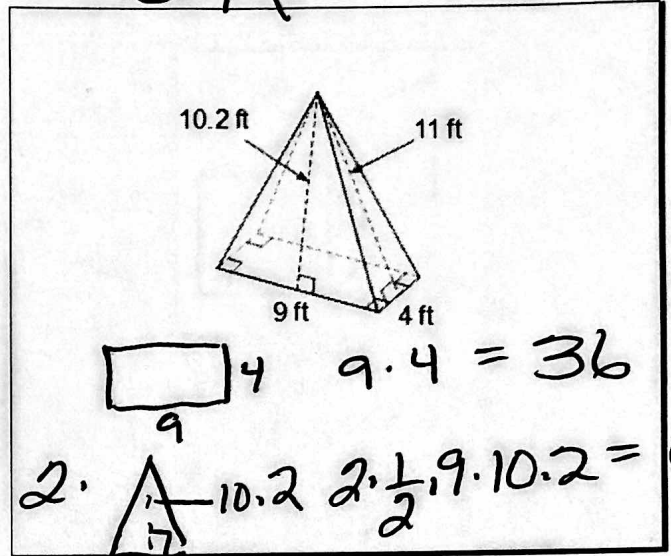
$$3 \cdot \frac{1}{2} \cdot 6 \cdot 7.2 = 64.8$$

$$15.6 + 64.8 = 80.4$$

80.4  
km<sup>2</sup>

Feb 28-5:39 PM

SA



$$9 \cdot 9 = 81$$

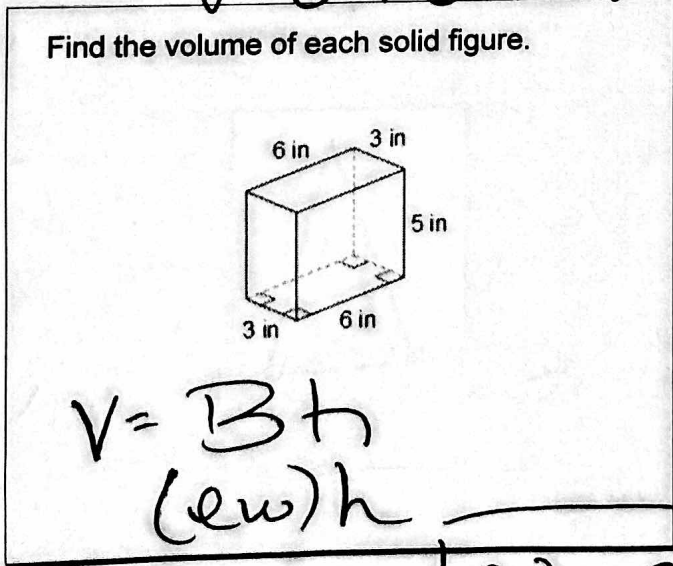
$$2 \cdot \frac{1}{2} \cdot 9 \cdot 10.2 = 91.8$$

$$81 + 91.8 = 172.8$$

171.8  
ft<sup>2</sup>

Feb 28-5:41 PM

Volume



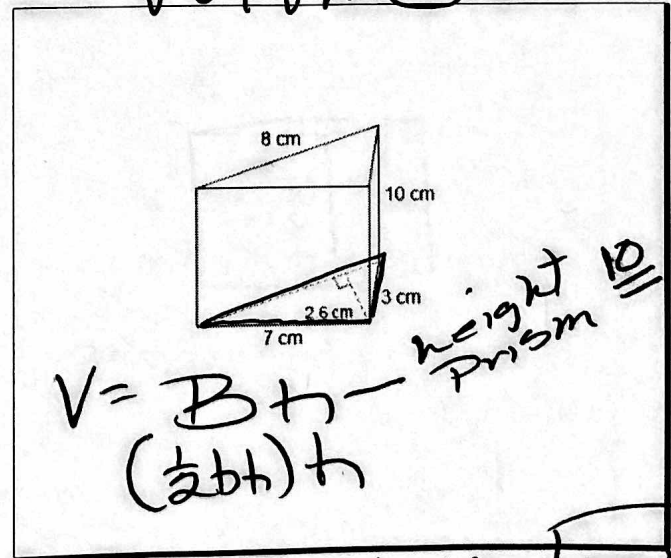
$$V = Bh$$

$$(lw)h$$

$$3 \cdot 6 \cdot 5 = 90 \text{ in}^3$$

Feb 28-5:44 PM

Volume



$$V = Bh$$

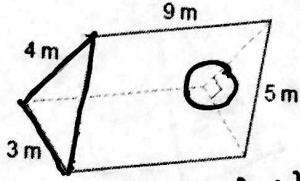
$$\left(\frac{1}{2}bh\right)l$$

height 10  
Prism

$$= \frac{1}{2} \cdot 8 \cdot 3 \cdot 10 = 120 \text{ cm}^3$$

Feb 28-5:46 PM

# Volume



$$V = B \cdot h$$

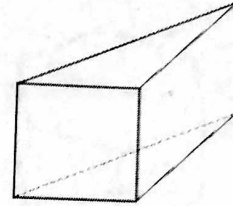
$$\left(\frac{1}{2}bh\right)l$$

- height of prism = 5

$$= \frac{1}{2} \cdot 3 \cdot 4 \cdot 9 = 54m^3$$

Feb 28-5:48 PM

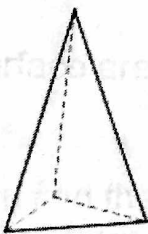
ID



Triangular Prism

Feb 28-5:52 PM

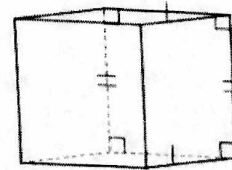
ID



Triangular Pyramid

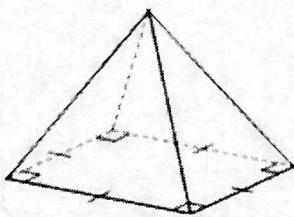
Feb 28-5:55 PM

ID



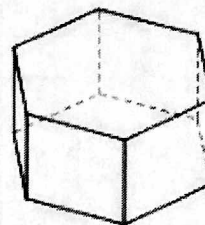
Rectangular Prism

Feb 28-5:56 PM



Square  
Pyramid

Feb 28-5:57 PM



Hexagonal  
Prism

Feb 28-5:58 PM

What is volume?

What is surface area?

How do you find the surface  
area of a triangular prism?

Feb 28-5:59 PM