

Next assessment will include:

- Problems like #5-7 [C-A2c and C-A3a]
- radian/degree conversion + usage
- Identifying cross sections
- Revolved solids



1.  $36\pi \approx 113.1$  sq in

3.  $600\pi \approx 1885$  ft

9. A

14. B rad to deg:  $\times \frac{180}{\pi}$

15.  $315^\circ$  deg  $\rightarrow$  rad:  $\times \frac{\pi}{180}$

9.)  $72^\circ$  Area:  $5\pi$   
radius?



$\frac{5\pi}{72^\circ} \times \frac{360}{360} = 25\pi$   
Area  
slice

$\frac{1800\pi}{72} = 72 \times \frac{x}{72}$

$25\pi = x$

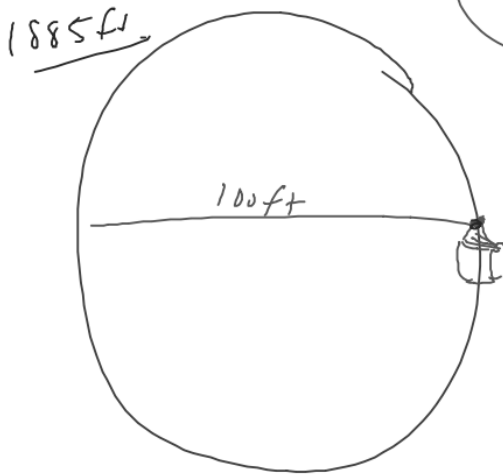
Circum =  $12\pi = \pi \cdot d$   
Questions?

Area?

$d = 12$

$r = 6$

$25\pi = \pi r^2$   
 $r = 5$



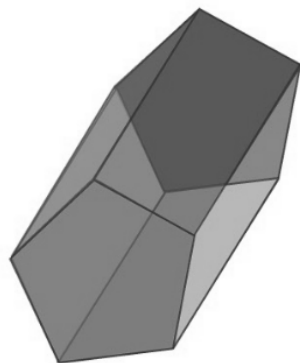
$C = \pi \cdot 100$

$C = 100\pi$

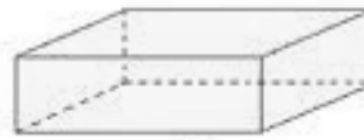
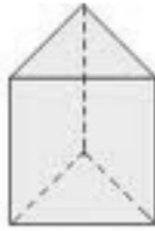
$\times 6$

$600\pi$

What is a prism? Tell your neighbors what you think.



A prism is a three-dimensional "s  
- both bases/endcaps are congru  
- the other faces are called "latel



Rectangular Prism

Cube

Different  
Prisms

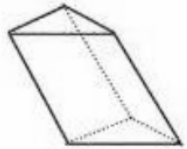


Figure 1

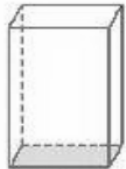
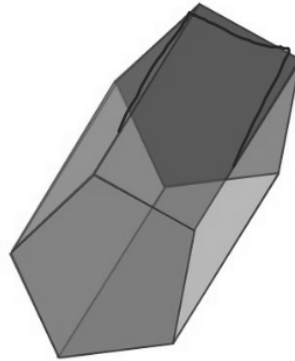
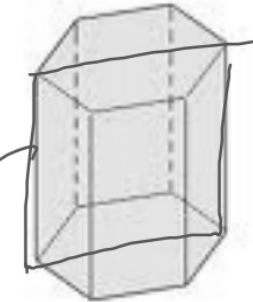


Figure 2



Pentagonal Prism



Hexagonal Prism

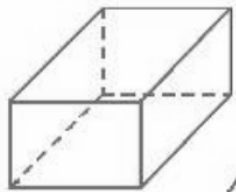


Figure 3

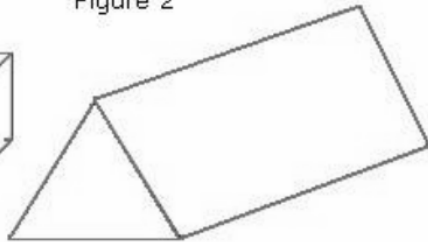
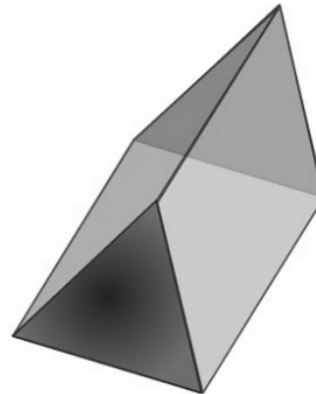


Figure 4



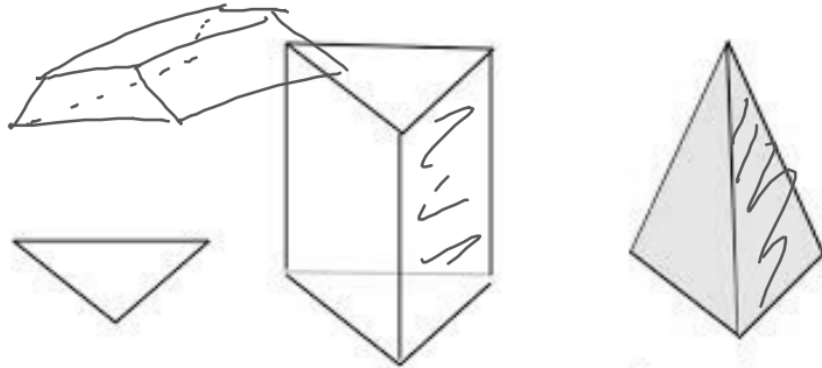
A prism is a three-dimensional "stretch" of a flat, 2D shape

- both bases/endcaps are congruent shapes
- the other faces are called "lateral faces"

On your desk are a variety of geometric solids

1. with your table, group them into 2 separate sets
2. Draw your sets onto your whiteboard
3. Be prepared to explain how you made your groupings

Compare and Contrast:  
Pyramid vs Prism



base

triangular prism

triangular pyramid

What similarities?

What differences?

What shapes are the faces?

• Prism: - rectangular faces  
- 2  $\cong$  bases

• pyramid • tri • faces  
• 1 base

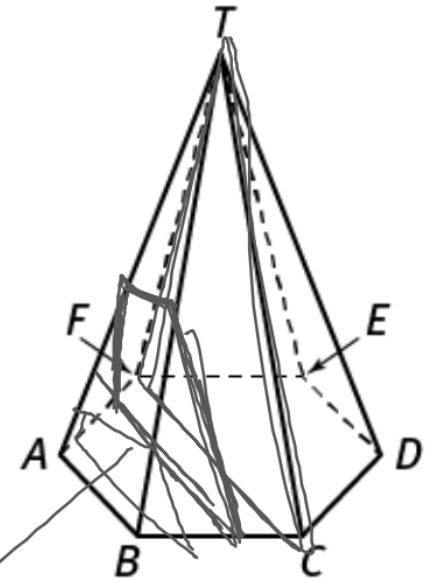
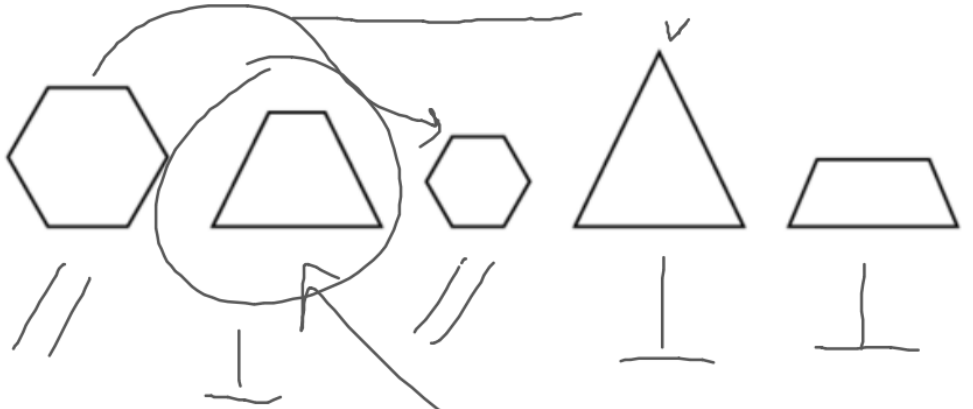
Turn to p 483 and complete #12a and b



p. 483:

b. Describe the 2D shape of a cross section that is perpendicular to the base of a prism.

c. Parallel or perpendicular to the base of this?



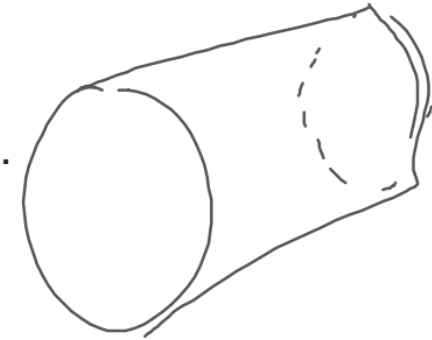
This is on p480

P486 (not in the book...please add to margin)

Cones are like pyramids with circular bases.

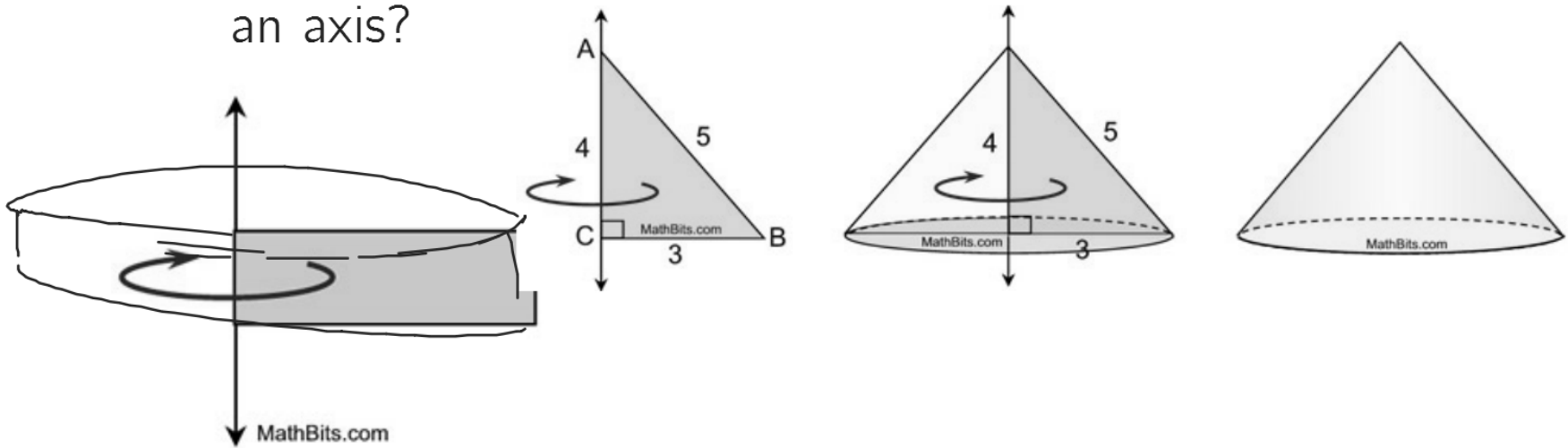


Cylinders are like prisms with circular bases.

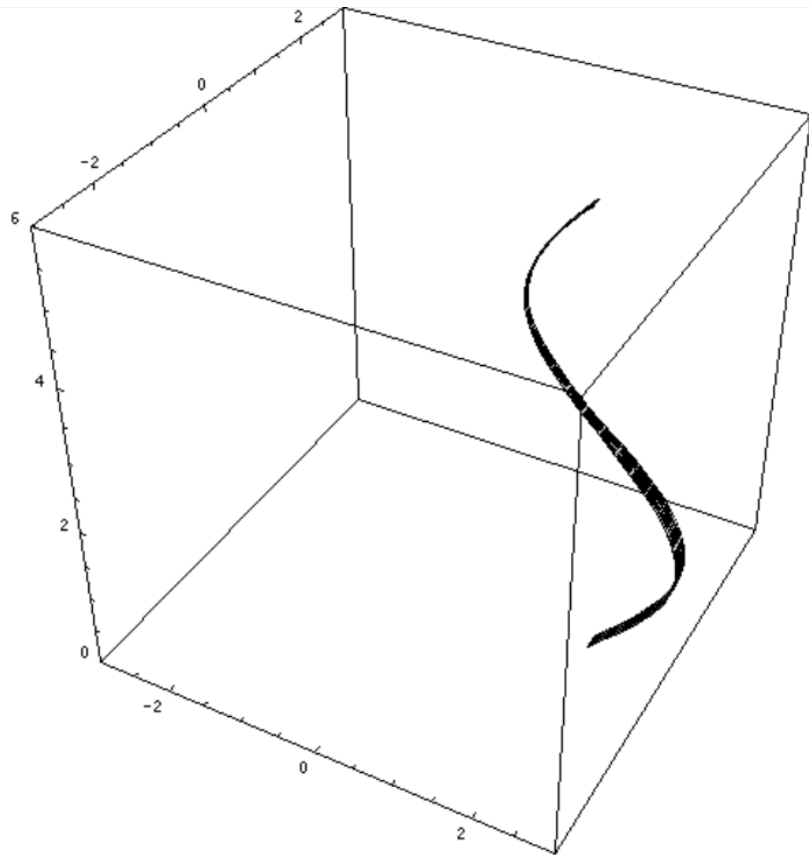


# Solids of Revolution

p. 490 What happens when you revolve a flat shape around an axis?

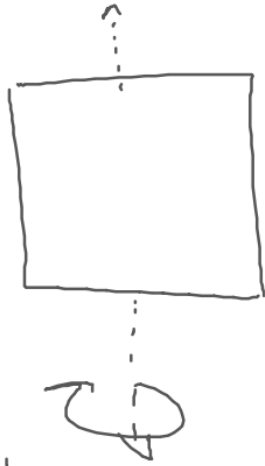






Do now: p 490 #3-5

3)



What is made?

4.)



What is made?

5.)



How?



HW:

p 493 #4,7,8,9,13,14

[GMD-4A and 4B]