

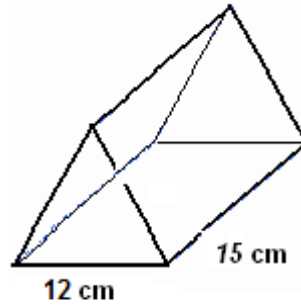
# CP Geometry - Unit 7 Review Jeopardy

## Terminology

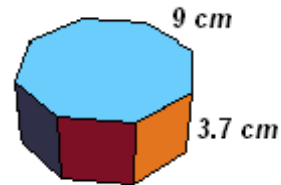
- 5.) Draw a net for a pyramid.
- 6.) Draw a net for a cylinder.

## Simple Figures – SA & V

- 5.) Equilateral Triangles and Rectangles

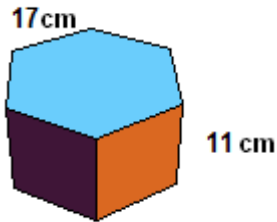


- 2.) SA & Volume of the figure below (Regular Octagons and Rectangles)

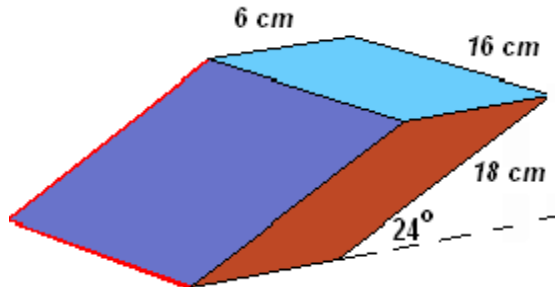


## Simple Figures – SA & V

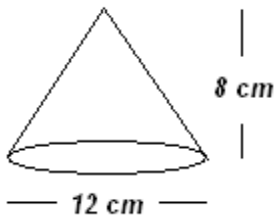
- 4.) Regular Hexagons and Rectangles



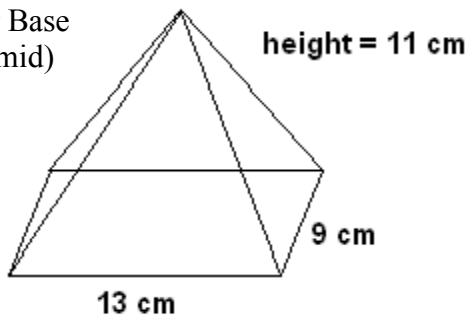
- 1.) SA & Volume of the figure below (Rectangular Bases with p-grams)



- 6.) Right Cone



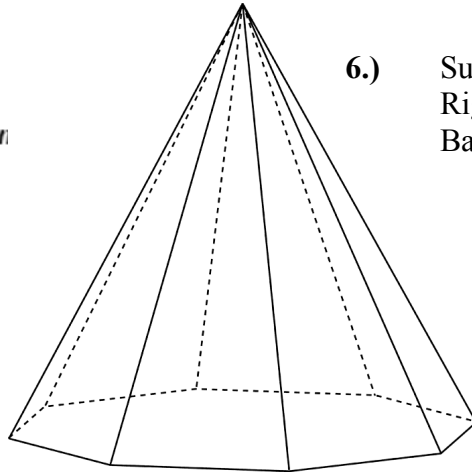
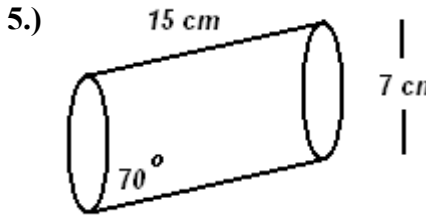
- 7.) Rectangular Base (Right Pyramid)



- 9.) A large saucepan (diameter 18") has spaghetti sauce 2" from the top. What is the maximum number of 3" diameter meatballs that can be added to the pot before it spills over (assume the meatballs sink to the bottom and use the pi button on your calculator (avoid rounding...))

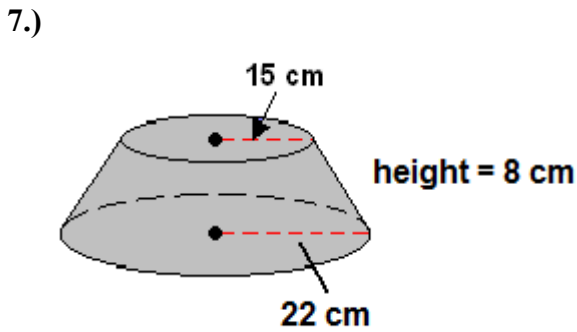
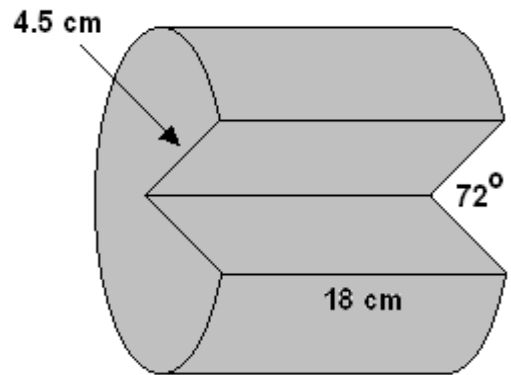
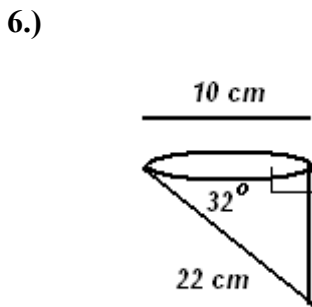
- 8.) A sphere's volume in cubic inches equals its surface area in square inches. What is the length of its radius?

**Funky Volume**

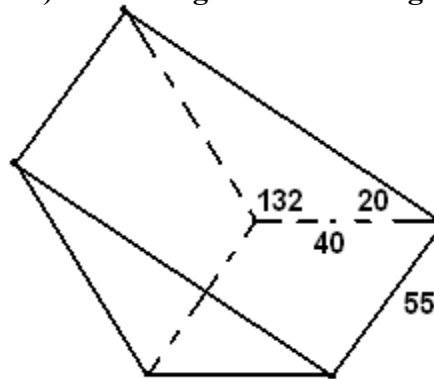


6.) Surface Area:  
Right Regular Hexagonal Pyramid  
Base Length = 21 cm; Height = 50 cm.

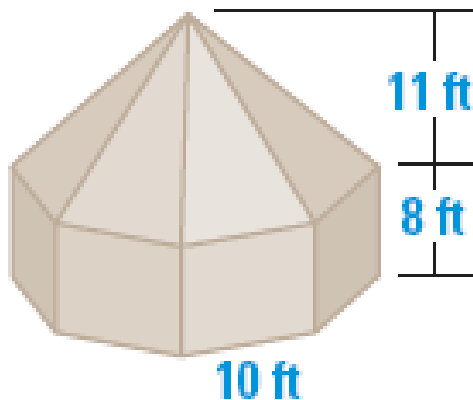
7.)



8.) **Triangles and Rectangles**



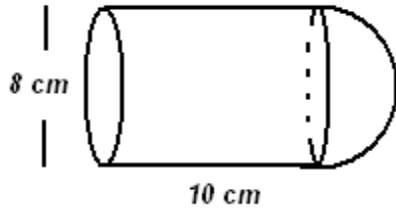
9.) A road-salt storage building is made of a regular octagonal pyramid (on top) and a regular octagonal prism (on bottom) as shown in the figure. Find the volume of salt the building can hold. Also, find the surface area of the building (don't include the floor)



( SEE PICTURE ON THE LEFT )

## Composite Figures

- 5.) Surface Area - Lids on both sides

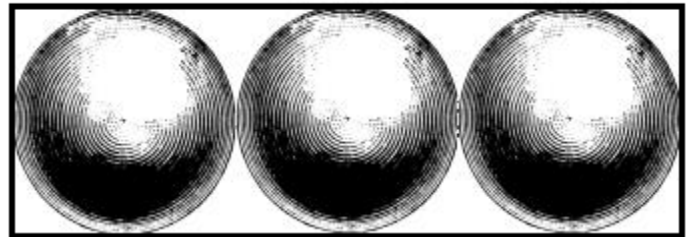


(Hemisphere on the right)

- 6.) Find the surface area and volume of the figure (hemisphere on a cone)



- 7.) Three marbles (of volume 179.6 cubic centimeters each) are placed snug against each other in a box. Find the percentage of volume inside the box not occupied by the marbles.



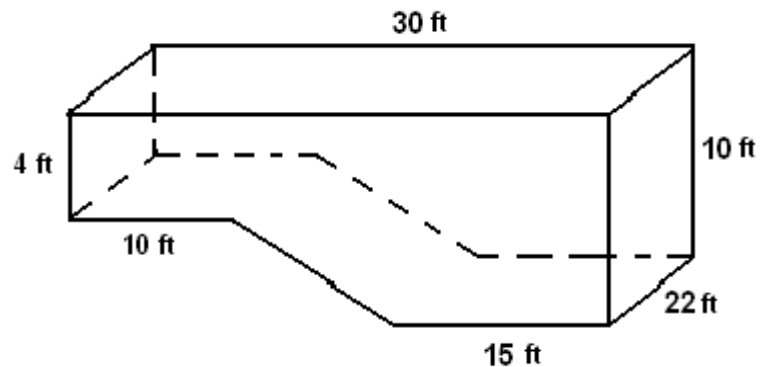
- 8.) Find the surface area exposed on a roll of paper towel if the roll is 15" tall, the paper extends 8" (in diameter) and the cardboard roll itself is 4" in diameter. Also, find the volume of the paper towel itself.



## "Fun" Problems!

- 9.) The pool is made entirely of rectangular and right-triangular faces.

3 Hoses (that pour water at the rate of 50 gallons per minute each) are filling the empty pool with water. They start running at 1:45 PM and stop when the pool is full. What time do they stop?



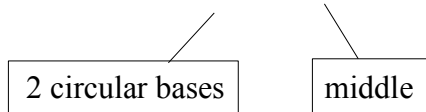
- 10.) How many meatballs of diameter 5 cm can be made from 2 pounds of ground meat if meat is 0.95 grams per cubic centimeter and meat is 453.59 grams per pound?

# Formula Sheet – NOT for use on the test!!

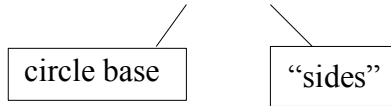
## Surface Area:

Most Figures: Find the Combined Area of all Faces

Cylinder =  $2\pi r^2 + 2\pi rh$        $h$  = height = distance between bases;  $r$  = radius



Cone =  $\pi r^2 + \pi rl$        $r$  = radius;  $l$  = slant height (hypotenuse)



Pyramid = Base +  $\Delta s$

Sphere =  $4\pi r^2$

## Volume:

- 1.) 2 Congruent Bases:  $V = Bh$
- 2.) 1 Base; Comes to a Point  $V = \frac{1}{3} Bh$  (Pyramid / Cone especially)
- 3.) Sphere  $V = \frac{4}{3} \pi r^3$