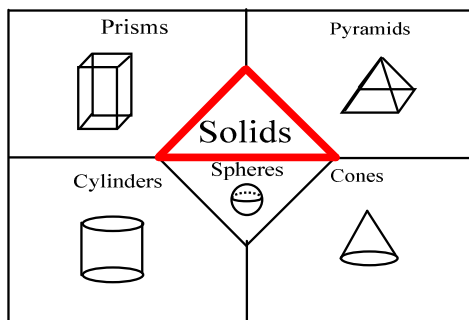
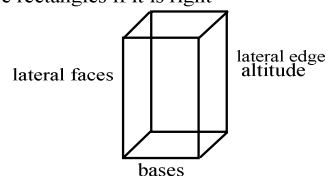




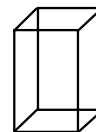
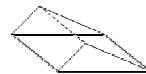
- 2 congruent / parallel polygon bases
- sides are parallelograms
- sides are rectangles if it is right

Prisms



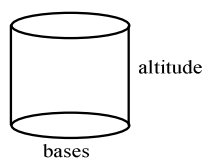
$$V = Bh \text{ or}$$

$$S.A. = ph + 2B \text{ or}$$



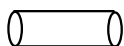
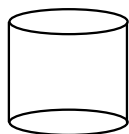
- 2 congruent / parallel circle bases
- no polygons sides
- side opens to a rectangle

Cylinders



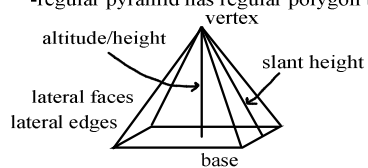
$$V = Bh \text{ or}$$

$$S.A. = Ch + 2B \text{ or}$$



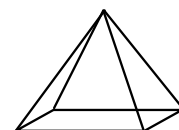
- 1 polygon base
- triangular sides
- regular pyramid has regular polygon base

Pyramids



$$V = \frac{1}{3}Bh \text{ or}$$

$$S.A. = \frac{1}{2}pl + B \text{ or}$$



Pyramid formula practice

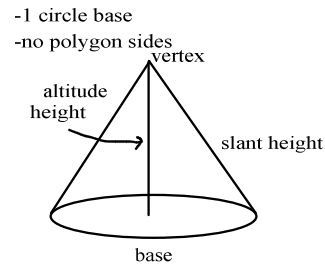
Find the volume of these square based pyramids

- 1.) height = 10, base edge = 5
- 2.) height = 12, base edge = 8
- 3.) height = 20, base edge = 24

Find the surface area of the following square based pyramids:

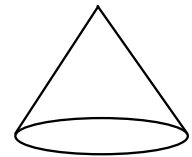
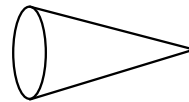
- 4.) base edge = 10, slant height = 15
- 5.) base edge = 13, slant height = 12
- 6.) base edge = 21, slant height = 30

Cones

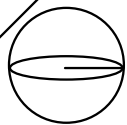


$$V = \frac{(1/3)Bh}{\text{or}}$$

$$S.A. = \frac{(1/2)Cl + B}{\text{or}}$$



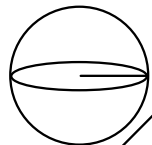
Spheres



-3 dimensional circle
-set of points in space equidistant from common center

$$V = \frac{(4/3)\pi r^3}{\text{or}}$$

$$S.A. = 4\pi r^2$$



Find the volume of the following cones

- 1.) $r = 4, h = 15$
- 2.) $r = 6, h = 11$
- 3.) $r = 9, h = 20$

Find the surface area of the following cones

- 4.) $r = 10, l = 20$
- 5.) $r = 7, l = 18$

Find the surface area and volume of the following spheres

- 6.) $r = 18$
- 7.) $r = 8$

