Day 3: Application of Volume

Okay let us review from what we learned last class period.

Cylinders

1) How do you find the volume of a cylinder?

Draw and label a picture of what is being described. Round answers to the nearest tenth if necessary.

2) A cylinder has a base with a radius of $24.1cm$ and a height of $17.3cm$. Find the volume to the nearest tenth.

3) A tank in the form of a cylinder is used for storing water. It has a diameter of $12\,ft$ and a height of $14\,ft$. What is the volume of the tank?

4) A cylinder has a volume of $100cm^3$ and a height of $10cm$. What is the radius of the base?

Cones

5) What is the volume formula of a cone?

Draw and label a picture of what is being described. Round answers to the nearest tenth if necessary.

6) A cone has a radius of 3cm and a height of 10cm. What is the volume of the cone?

7) Given the volume of a cone is 65in^3 and the radius is equal to 3in. What is the height of the cone?

8) The volume of an ice cream cone is 127cm^3 and the height is 8 cm. What is the radius of the ice cream cone?

9) If a cone has a height of 14.7 cm and a diameter of 5.3 cm, what is the volume?

Pyramids

10) What is the equation we use to find the volume of a pryamid?

Draw and label a picture of what is being described.

11) Find the volume of King Tut's pryamid. If the base has width of $300\,ft$ and a length of $400\,ft$ and if fit stands at $200\,ft$ tall. What is the volume of the pryamid?

12) Let the base of the pryamid have an area of $100cm^2$ and let it have a height of $15cm$. What is the volume of the pryamid?

13) A hexagon pyramid has a volume of $374.4\,yd^3$. If the height of the pyramid is 12 yd tall, what is the area of the base?

 If the apothem of the base is 5.2 yds, what does each side of the base measure?

Spheres

14) What is the equation that we use to find the volume of a sphere?

Draw and label a picture of what is being described.

15) If a ball has a radius of $4cm$. What is the volume of the ball?

16) If the sphere has a volume of $81cm^3$. What is the radius of the sphere?

17) If an astroid that is spherical has a diameter of $10\,ft$. What is the volume of the astroid?

18) If the sphere has a volume of $286.3m^3$. What is the radius of the sphere?