

Surface Area and Volume Unit Homework Packet

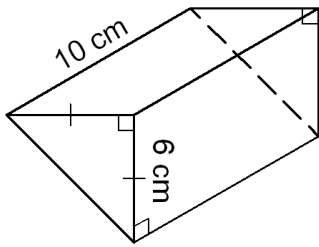
HWK #1 Prisms and Pyramids Due 4/25

HWK #2: Cylinders and Cones Due 4/27-4/28

HWK #3: Working Backwards Due 5/2

HWK #1 Prisms and Pyramids Due 4/25

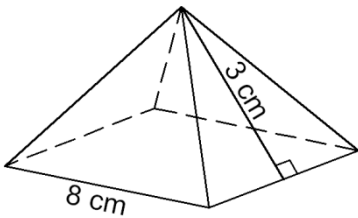
1. Find the total surface area AND volume of the solids below. **Draw** a picture, **label** all known quantities, show the **formula** used, show all **work**, and **label** your answer.



Surface area:

Volume:

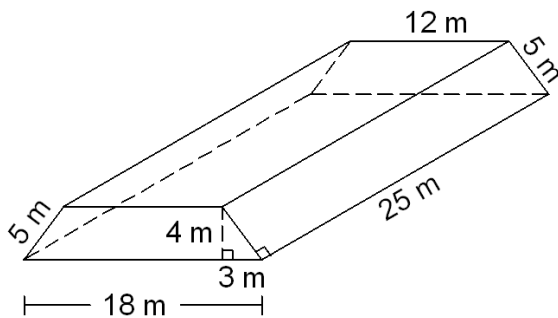
2. Find the total surface area AND volume of the solids below. **Draw** a picture, **label** all known quantities, show the **formula** used, show all **work**, and **label** your answer.



Surface area:

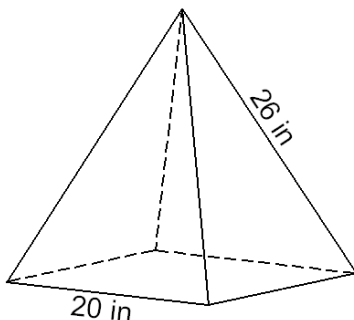
Volume:

3. Find the lateral area



Lateral area:

4. Find the lateral area.



Lateral area:

HWK #2: Cylinders and Cones Due 4/27-4/28

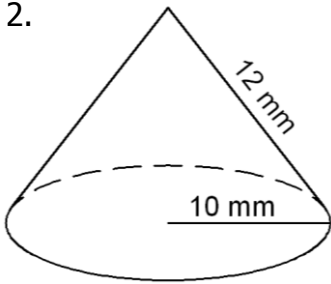
Find the total surface area of the solids below. **Draw** a picture, **label** all known quantities, show the **formula** used, show all **work**, and **label** your answer.

1. Cylinder with a radius of 5 ft. and a height of 8 ft.

Surface area:

Volume:

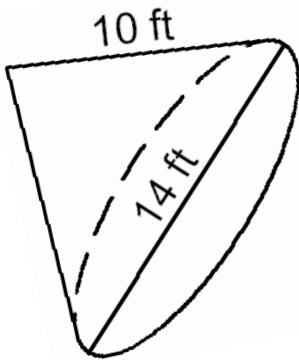
2.



Surface area:

Volume:

3. Find the lateral area.



HWK #3: Working Backwards Due 5/2

Find all missing measurements.

1. A cube has a volume of 216 in^3 . Find the volume of a sphere that would fit INSIDE the cube.
2. A hemisphere has a surface area of $6\pi \text{ in}^2$, find the volume of the hemisphere.
3. The volume of a cone is $196\pi \text{ in}^3$ and the height is 12 inches. What is the diameter?
4. A square pyramid has a volume of 862.5 cm^3 and a height of 11.5 cm. Find the perimeter of the base.
5. The lateral area of a cone is 71.6 mm^2 and the slant height is 6 mm. What is the volume of the cone?
6. A rectangular prism has a surface area of 432 in^2 , a height of 6 in, and a width of 12 in. What is the volume?