

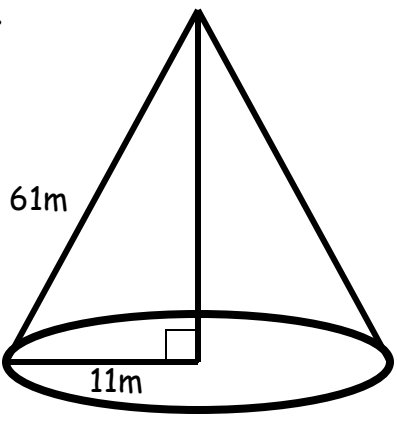
Leave all answers as simplified fractions and in terms of  $\pi$ .

Figure

Volume

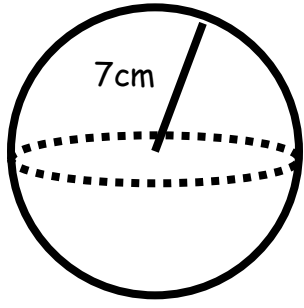
Area

1.



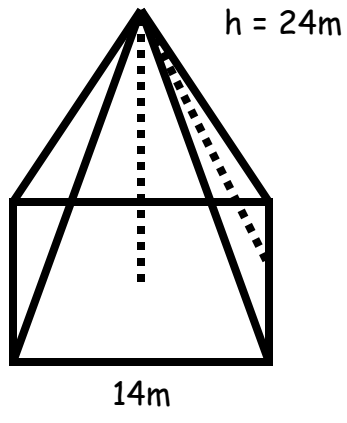
Name: \_\_\_\_\_

2.



Name: \_\_\_\_\_

3.



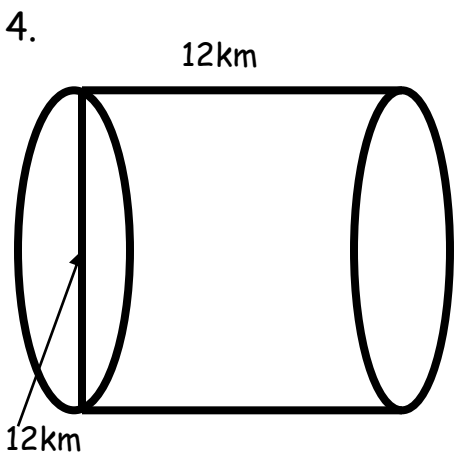
Name: \_\_\_\_\_

Leave all answers as simplified fractions and in terms of  $\pi$ .

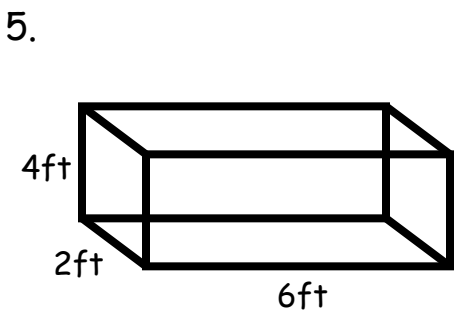
Figure

Volume

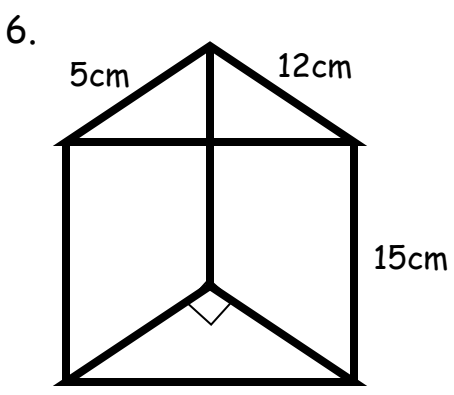
Area



Name: \_\_\_\_\_

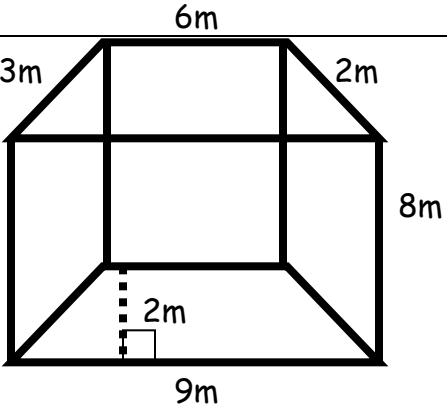


Name: \_\_\_\_\_

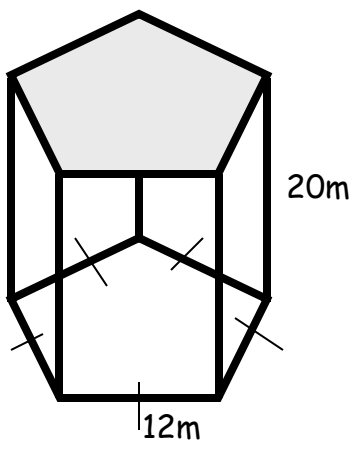


Name: \_\_\_\_\_

Leave all answers as simplified fractions and in terms of  $\pi$ .

Figure	Volume	Area
<p>7.</p>  <p>Name: _____</p>		

8. Round all decimal answers to the nearest tenth.



- Height of Object: \_\_\_\_\_
- Area of Base: \_\_\_\_\_
- Perimeter of Base: \_\_\_\_\_
- Volume: \_\_\_\_\_
- Lateral Area: \_\_\_\_\_
- Total Area: \_\_\_\_\_

Name: \_\_\_\_\_

1. A cylinder has a volume of  $3375\pi$ . If the height equals the radius, find the total area of the cylinder.

2. If the ratio of areas of two similar prisms is 4:169, find the ratio of volumes.

Draw a picture for each scenario. Round all answers to the nearest tenth.

3. Two similar polygons have a scale factor of 3:5. What is the ratio of the perimeters? What is the ratio of the areas?

4. The ratio of areas of two similar polygons is 9:625. The perimeter of the smaller polygon is 12. What is the perimeter of the larger polygon?

5. The ratio of perimeters of two similar polygons is 4:15. The area of the larger polygon is 64. What is the area of the smaller polygon?

6. The circumference of the base of a cone is  $16\pi$  in and the volume is  $320\pi$  in<sup>3</sup>. Find the lateral and total area of the cone.

7. A square pyramid has a total area of  $384\text{m}^2$  and a base area of  $144\text{m}^2$ . Find the lateral area and volume.

8. Two similar cylinders have lateral areas  $81\pi$  and  $144\pi$ . Find the ratio of the heights.

9. Find the volume and total area of a sphere that has a circumference of  $64\pi$ .

10. The ratio of the volumes of two spheres is 27 to 64. Find the ratio of their surface areas.