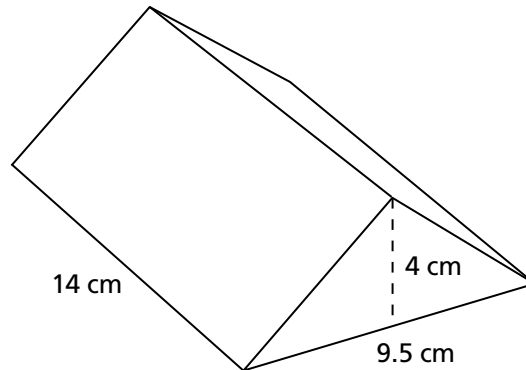


Additional Practice**Investigation 3****Filling and Wrapping**

1. What is the volume of the prism below? Explain your reasoning.



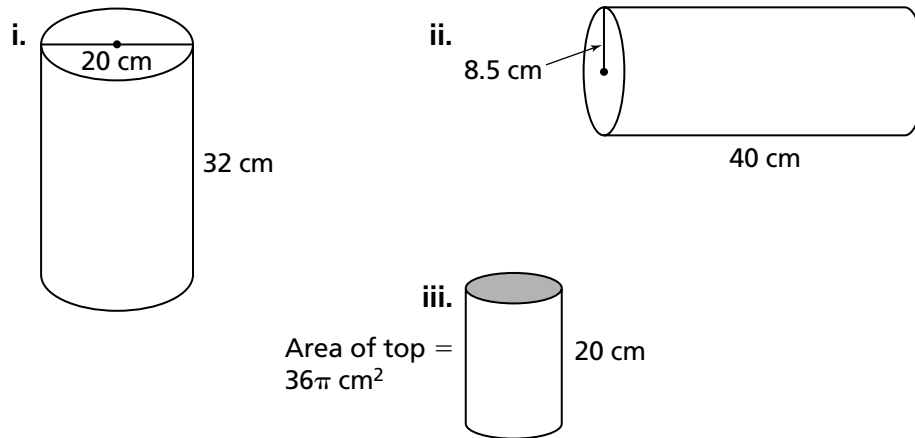
2. The volume of a prism is 275 cubic centimeters. The area of the base of the prism is 25 square centimeters. What is the height of the prism? Explain.
3. Give the dimensions of three different rectangular prisms that have a volume of 240 cubic centimeters.
4. a. The circumference of the base of a cylinder is 16 centimeters. The height of the cylinder is 10 centimeters. What is the surface area of the cylinder?
- b. What is the volume of the cylinder?

Additional Practice *(continued)*

Investigation 3

Filling and Wrapping

5. Use the closed cylinders below to answer parts (a) and (b).



a. What is the surface area of each cylinder?

b. What is the volume of each cylinder?

6. a. A cylindrical storage tank has a radius of 1 meter and a height of 3 meters. What is the surface area of the storage tank?

b. What is the volume of the storage tank?

7. a. A cylinder without a top has a height of 25 centimeters and a circumference of 10π centimeters. What is the surface area of the cylinder?

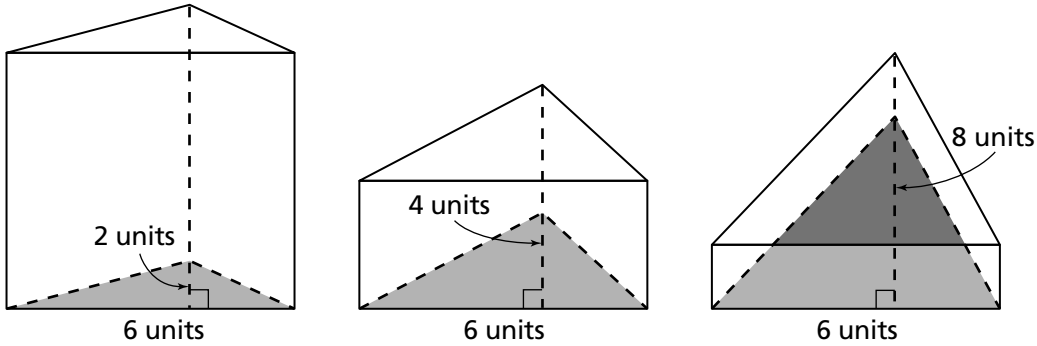
b. What is the volume of the cylinder?

Additional Practice *(continued)*

Investigation 3

Filling and Wrapping

8. Below are three triangular prisms (not drawn to scale). The height of the first prism is 8 units, and the volumes of all three prisms are the same. What are the heights of the other two prisms?



9. Below are three triangular prisms (not drawn to scale). The height of the first prism is 8, and the volumes of all three prisms are the same. What are the heights of the other two prisms?

