

Filling and Wrapping Test Review Sheet

Short Answer

1. A circular cookie cutter has a 4.5 inch radius. What is the area of a cookie cut from this cutter?

2. The circumference of a circle is 314 feet. What is its diameter?

3. One face of a cube has an area of 49 cm^2 .
 - a. What is the surface area of the cube?

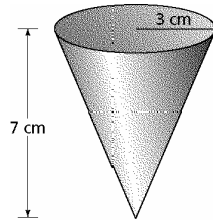
 - b. What is the volume of the cube?

4. Mali keeps her favorite jewelry in a cubic box with a volume of 512 . What is the surface area of her box?

5. The circumference of the base of a cylinder is 24 cm. The height of the cylinder is 10 cm.
 - a. What is the surface area of the cylinder?

 - b. What is the volume of the cylinder?

6. Use this information: Ms. Wohlshied has to purchase paper cups and containers of water for the track-and-field competition. She knows that students often use a cup only once and then throw it away. She buys cone-shaped cups because they are nice for holding, don't hold very much water (which she thinks is good, as students often don't finish the water in their cups), and don't cost very much. This is an illustration of the cups she buys.



- a. How many cubic centimeters of water does the cone-shaped cup hold?
- b. How many times greater is the volume of a cone with a radius of 6 cm and a height of 14 cm than the volume of Ms. Wohlshied's cup?
7. A tepee is a conical shaped tent used for shelter by the Plains Indians of North America. Suppose a tepee has a radius of 8 ft and is 12 ft high.
- a. How much floor space does the tepee have? (What is the area of the base)
- b. What is the volume of the tepee?
8. A sphere has a diameter of 12 m. What is its volume?