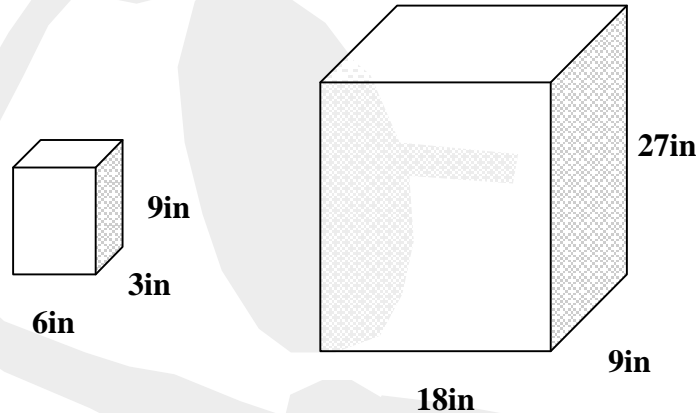


Test Review Book 6

Name: _____

The Apple Theater concession sells two sizes of popcorn, a micro box and a jumbo box. Answer questions 1-5, and remember to show enough work so that someone reading your paper will know how you found your answers.



- 1) About how many square inches of cardboard are needed to make the micro box?
- 2) About how many square inches of cardboard are needed to make the jumbo box?
- 3) What is the scale factor from the small box to the large box?
- 4) How many times more material are used for the large box? Why?
- 5) How many cubic inches of popcorn will fit in the micro box if the top of the popcorn is level with the top of the box?
- 6) How many cubic inches of popcorn will fit in the jumbo box if the top of the popcorn is level with the top of the box?
- 7) How many times more popcorn can fit in the large box? Why?

8) If the micro box sells for \$0.75, what should the price of the jumbo box be if it is based on the amount of popcorn the box holds?

9) One face of a cube has an area of 49 cm^2

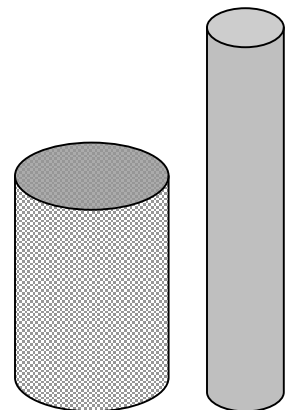
a. What is the surface area of the cube?

b. What is the volume of the cube?

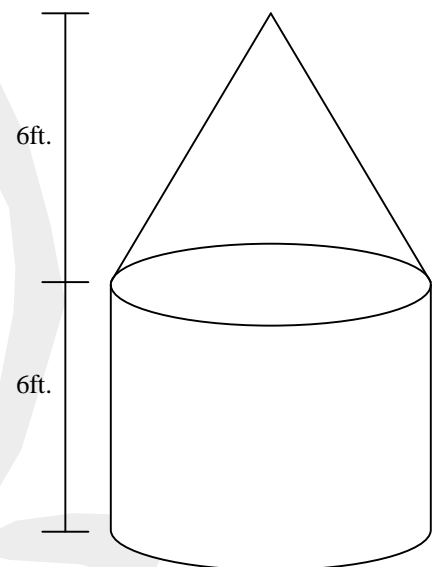
10) These are scale drawings of 2 cylinders. One cylinder has a base circumference of 18 cm and a height of 11 cm. The other cylinder has a base circumference of 11 cm and a height of 18 cm.

a. Do the cylinders have the same volume? Show calculations.

b. Do the cylinders have the same surface area? Show your calculations.



11) This is a sketch of the nose of the delivery system for a new satellite. Find its volume.



Diameter of the base is 8 ft.