

Name: Answer Key

Date: _____

Chapter 11 Test Review

In your Notes



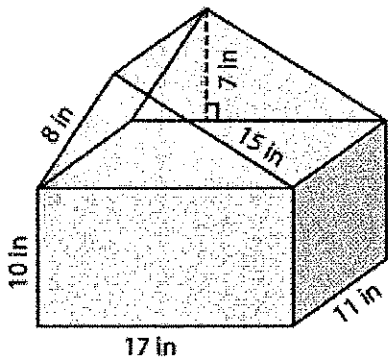
Figure	Volume Formula:	Surface Area Formula:

Similarity Ratio:
Area Ratio:
Volume Ratio:
Euler's Formula:

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What is the volume and surface area of the following composite shape?

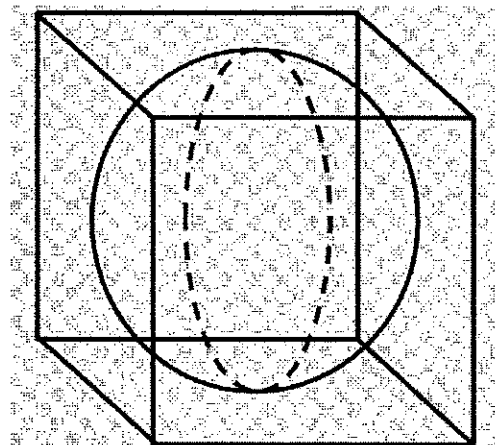


$$V = 2545.5 \text{ in}^3$$

$$SA = 1493 \text{ or } 1306 \text{ or } 1119 \text{ in}^2$$

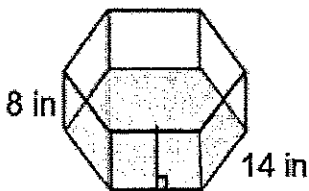
A sphere is in a cube as shown below. What is the maximum volume of the sphere if a side of the cube is 18 in.

$$V = 108\pi \text{ in}^3$$



What is the surface area of the following shape?

1)



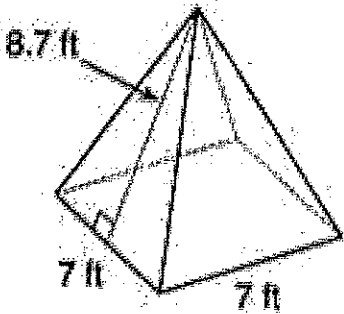
$$SA = 1690 \text{ in}^2$$

Volume:

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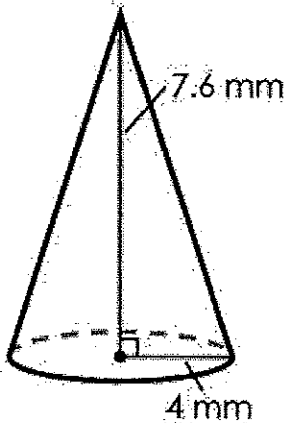
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What is the surface area of the pyramid?



$$SA = 170.8 \text{ ft}^2$$

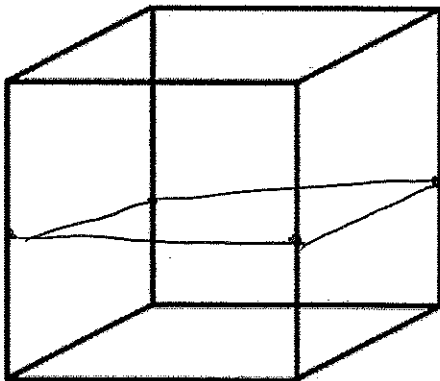
What is the surface of the cone?



$$C = 8.6$$

$$SA = 50.4\pi \text{ mm}^2$$

Draw a cross section on the cube formed by the plane intersecting the front of the cube and the back of the cube. What shape is this?



square

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The number of square centimeters in the surface area of a sphere is twice the number of cubic centimeters in the volume of a sphere. Find the radius of the sphere.

$$r = \frac{3}{2}$$

The volume of a sphere is 32π . What is the surface area of the sphere?

$$SA = 33.2 \pi \text{ in}^2$$

The surface area of two similar figures are 25 in squared and 36 in squared. If the volume of the smaller figure is 250 in cubed, what is the volume of the larger figure?

$$X = 432 \text{ in}^3$$

What is the surface area of a cylinder that has a circumference of 18 in?

$$SA = 123.6 \text{ in}^2$$