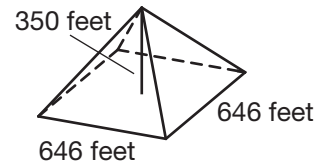


Assignment

Name _____ Date _____

Modern Day Pyramids Volume of a Pyramid

The Luxor Hotel in Las Vegas is a replica of Khafre Pyramid at Giza, one of the seven wonders of the world. The Luxor's base measures 646 feet by 646 feet, and it is 350 feet tall.



1. Find the total volume of the Luxor Hotel. Explain your work in complete sentences.

2. The Khafre Pyramid has a volume of 2,226,450 cubic meters. If its base is 215 meters by 215 meters, what is its height?

3. Find the volume of the combined solid figure, where the base is a cube with an edge of 10 feet and the height of the roof is also 10 feet.

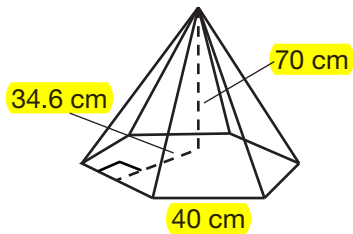
4. If the bases of 2 pyramids have the same area and they are the same height, are the pyramids congruent? Use complete sentences in your answer.

5. What have you noticed about the faces of regular pyramids? (The examples you have seen on the previous page are all regular pyramids.)

2

Find the volume of each pyramid.

6.



7.

