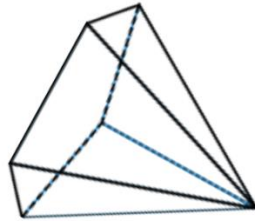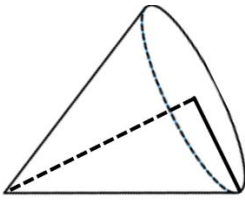G8-2
Volume of Pyramids and Cones
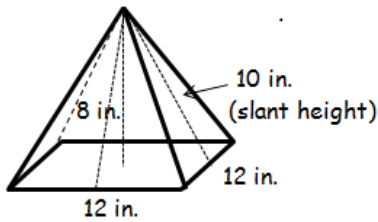
Name_____

Check for understanding:

For each solid below: (a) identify the type of solid (be specific)

(b) shade in the base or bases

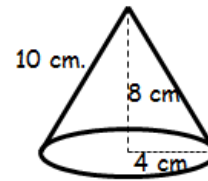(c) draw in and label the height
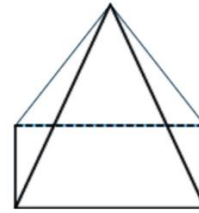
Practice: C-Level

Find the volume of each. Show your work.
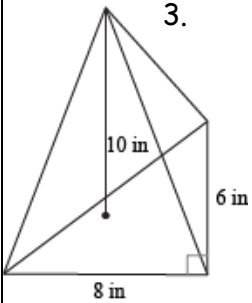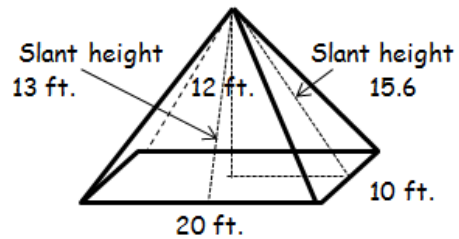
1. 10 in. (slant height) 8 in. 12 in. 12 in.	2. 10 cm. 8 cm 4 cm
Volume_____	Volume_____
3. 10 in 6 in 8 in	4. Slant height 13 ft. 12 ft. Slant height 15.6 10 ft. 20 ft.
Volume_____	Volume_____
5. 8cm 3 cm. 5 cm.	6. 17 in 10 in 12 in
Volume_____	Volume_____

7. A movie theater serves a small size of popcorn in a conical container and a large size of popcorn in a cylindrical container.
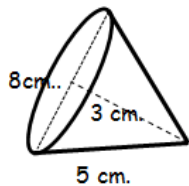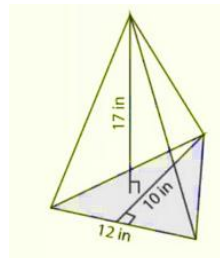a. How many small containers of popcorn do you have to buy to equal the amount of popcorn in a large container?

3 in.

POPCORN 6 in.

$2.00

3 in.

Butter

POPCORN 6 in.

$4.00

b. Which container gives you more popcorn for your money? Explain your reasoning.

B-Level

Find the missing measures. Hint, draw a picture, draw a picture, draw a picture:

8. Height of a pyramid with a base of 14 sq. cm. and a volume of 126 cu. cm.	9. Radius of a cone with a height of 6 in. and a volume of 50π cu. in.	10. Radius of a cone with height of 15 in. and volume of 245π cu. in.

11. Sarah is working on a project for her Social Studies class. She knows that the volume of the large pyramid in Egypt is 2,592,100 cu. m. She also knows that the base is 52,900 sq. m. She needs to find the height of the smaller pyramid and all the information she has is that it is 1/3 the height of the larger pyramid. What is the height of the smaller pyramid?

12. Calculate the amount of food that can be placed in the feeder. If a cat eats 1 cup of food every day (1 cup = 14.4 cu. in.), will the feeder hold enough food for five days? Explain.

2.5 in.

7.5 in.

4 in.