ASSIGNMENT: Volume Review
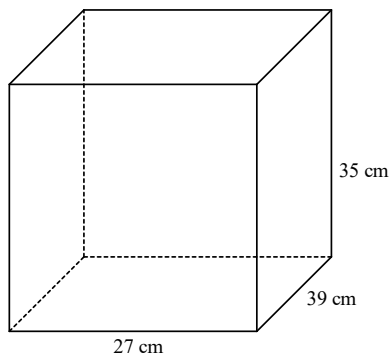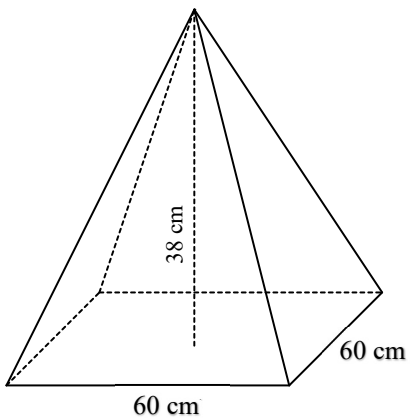
Name: _____

Date: _____

Round your answers to the nearest hundredth. Don't forget to include units!

1. What is the volume of the box shown, to the nearest cubic centimeter?

_____

35 cm

39 cm

27 cm

2. A parade includes a large spherical balloon. What is the volume of the balloon if it has a radius of 25 feet?

_____

3. What is the volume of this pyramid?

_____

38 cm

60 cm

60 cm

4. A farmer's cylindrical silo has a radius of 1.5 m and is filled with grain to a height of 7 m. He is using the grain to fill rectangular crates that are each 30 cm by 50 cm by 70 cm. How many crates will he be able to fill completely full?

_____

5. What is the volume of a cone with radius of 50 cm and a slant height of 75 cm?

_____

6. What is the volume of the figure below?

_____

r = 11.5 cm
h = 19 cm
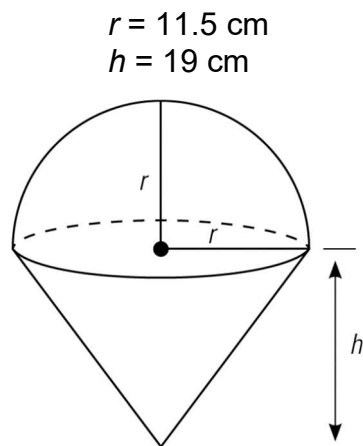
7. If a cylinder had a radius of 7 cm and a volume of 3000 cm^3 what is the height of the cylinder?

_____

8. A delicate glass tube is being delivered to a school science lab. The tube is 60 cm long with a radius of 0.75 cm. It is being shipped in a cylindrical container with a length of 70 cm and a radius of 2.25 cm.

a) Determine the volume of the glass tube, to the nearest hundredth.
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_____

b) Determine the volume of the shipping container, to the nearest hundredth.

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c) Calculate the amount of sawdust, in liters, required to fill the area between the shipping container and the glass tube. Round your answer to the nearest tenth. (<u>Hint</u>: 1 L = 1000 cm^3)

_____

1. 36 855 cm^3
2. 65 449.85 ft^3
3. 45 600 cm^3
4. 471 full crates
5. 146 351.09 cm^3
6. 5816.66 cm^3
7. 19.49 cm
8. a) 106.03 cm^3, b) 1113.30 cm^3, c) 1.0 L