Short Answer: Show all your work and formulas used. Round answers to the nearest hundredth.

1. What is the volume of this cone?

   ![Cone](image1)

   Volume: __________________________

2. What is the volume of this cone?

   ![Cone](image2)

   Volume: __________________________
3. What is the volume of a cone with a height of 39 cm and a diameter of 19 cm? What is its capacity in mL?

Volume: __________________________

Capacity: _________________________

4. What amount of ice cream in litres can fit into a waffle cone with a diameter of 11 cm and a height of 12 cm? (Imagine the ice cream fills the cone right to the top, and does not go above the edge of the cone.)

Answer: ____________________________

5. What is the capacity, in litres, of sawdust in a cone-shaped pile 4 m high and 5 m wide across the base?

Capacity: __________________________
6. What is the volume and capacity of this pyramid?

Volume: ___________________
Capacity: ___________________

7. Find the volume and capacity of this square based pyramid.

Volume: ___________________
Capacity: ___________________
8. Find the volume and capacity, in Litres, of this square based pyramid.

Volume: ______________________

Capacity: ____________________

9. What is the capacity, in litres, of a square-based pyramid with a height of 6 cm and side lengths of 6 cm?

Capacity: ____________________

10. What is the volume of a sphere with a radius of 1.3 feet?

Volume: ______________________
11. A parade includes a large spherical balloon. What is the capacity, in US gallons, of the balloon if it has a radius of 21 feet? (There are 7.48 US gallons in a cubic foot.)

Capacity: ________________

**Problem**

1. What is the volume of the object shown below? It has the following dimensions:
   - \( r = 12 \text{ cm} \)
   - \( h = 14.7 \text{ cm} \)
   - \( s = 19 \text{ cm} \)

   ![Diagram of a cone and a sphere](image)

Volume: ________________
2. A grain silo is in the shape of a cylinder, and it has a dome-shaped roof. It has the following dimensions:
   \[ r = 3.2 \text{ m} \]
   \[ h = 18 \text{ m} \]

What is the volume of grain that this silo can hold? What is its capacity in Litres?

Volume:__________________________

Capacity:________________________