Volume Final Practice Part 3

Name: Date:

Directions: Read each question carefully and neatly show all work when answering. All the information required by you is provided.

1. A. There was a vacant room with the dimensions of 15m long, 12m wide and 10m high. What is the volume of this room?(2 marks)

    B. If you owned a storage container that was a cylinder with the measurements: 12m diameter and 6m high. What is the volume of the container?(2 marks)

2. Tanner owned a rectangular prism-shaped tree fort that was had a volume of 224m^3. The length of the fort is 7m, the width is 8m, how high is it?(2 marks)

3. If Mr. T had a cylinder with a radius of 6m and a volume of 2009.6 m^3, what is the cylinder's height? (2 marks)(round your answer to the tenth place).

4. If Hailey owned a cylinder that was 9m high and had a volume of 452.16 m^3, what is the radius of this container?(2 marks)

5. Mr. C's completely emptied(gutted) his classroom so it contained a volume of air that was 600 m^3. If 12 students walked into his classroom, what volume of air remains with these students in his classroom? The volume of space taken up by the average person is 0.095m^3.(2 marks)

6. A. Mr. Maloney bought a warehouse for his water business. If the warehouse is 30m long, 15m high and 50m wide, what is the volume of space available for his water business?(1 mark)

B. If his water containers are shaped like a cube and measure 5m on one side, what is the volume of each water container?(1 mark)

C. If he is able to pile and stack these water containers tight, how many can he pack(fit) into his warehouse from floor to ceiling?(2 marks)

Bonus Question
D. If his warehouse is packed with these containers, how many litres of water does he have in total? Remember, 1 m^3 = 1000 liters of water.(1 mark)

(Now Check your work!)