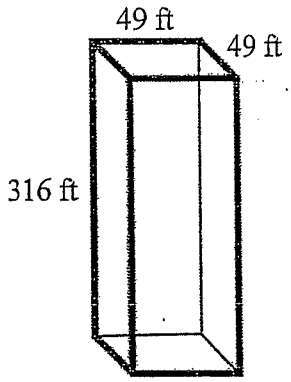
Hand In – Volume

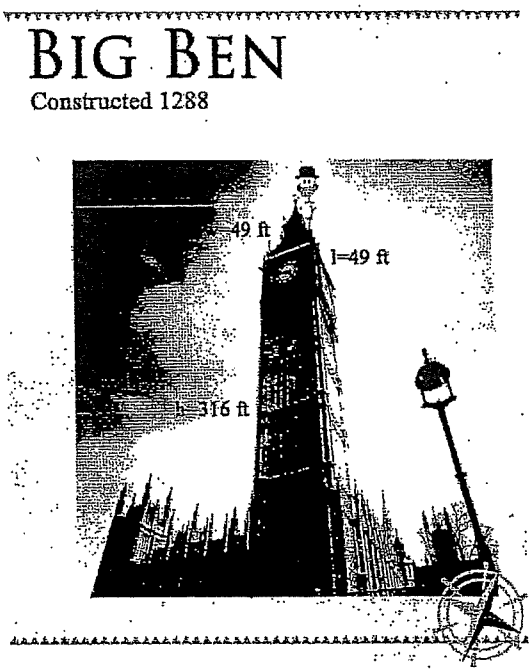
Name: _____ **Total:** _____/18

Mr. Shuhyta went on vacation with his family. Calculate the volume of the various structures that we visited (all dimensions are real). You MUST write out a **FORMULA** for each and round to two decimal places:

1. Big Ben (Rectangular Prism)

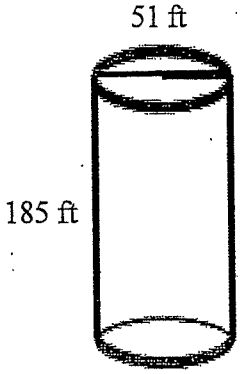
/2

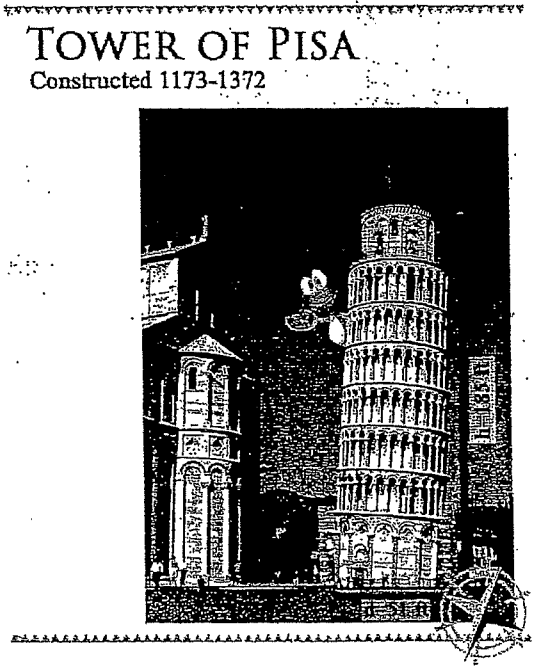




2. Tower of Pisa (Cylinder)

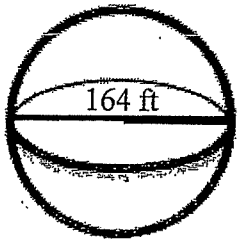
/2

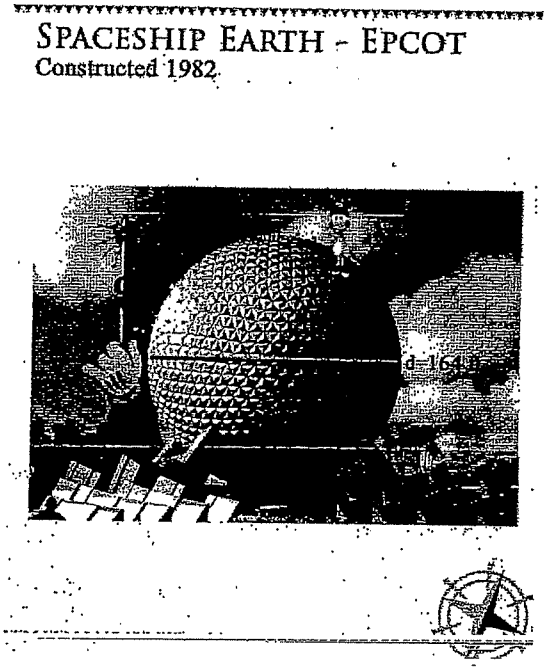




3. Epcot (Sphere)

/2

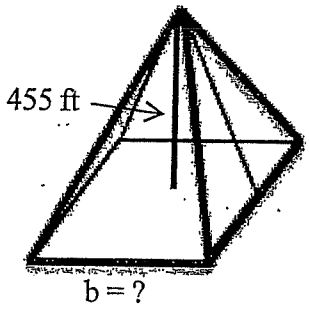


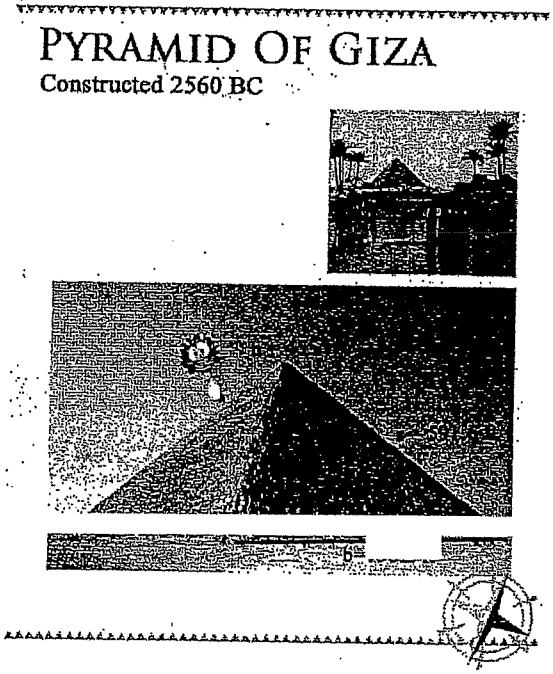


WORK BACKWARDS to calculate the missing measurements on the next two objects. You MUST write out a **FORMULA** for each and round to two decimal places:

4. Pyramid of Giza (Pyramid). If the volume is 86 728 830.07 ft^3. Calculate the base.

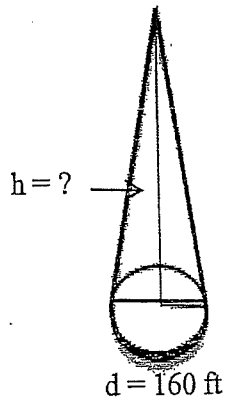
/2

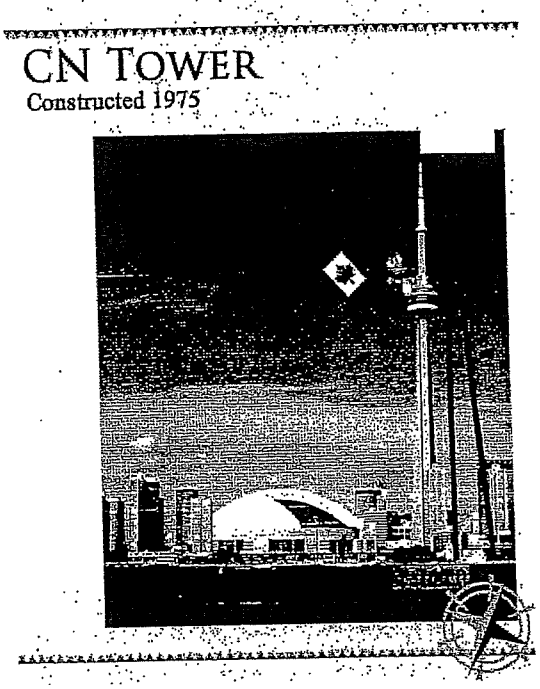




5. CN Tower (Cone). If the volume is 12 166 927.58 ft^3. Calculate the height.

/2





WORD PROBLEMS: For the following questions, please include all elements for a proper solution (formula, units, sentence, diagram, etc.).

6. While at Disney World Dawson got thirsty. He bought a can of pepsi. The dimensions of this cylinder were 20 cm tall with a diameter of 15 cm.

   a. Calculate the total volume.

/3

   b. Convert the volume to litres. *1 L = 1000 cm^3*

/1

7. While in Egypt, Mr. Shuhyta bought a souvenir miniature pyramid. The base is 4 cm and the height is 6 cm.

   c. Calculate the total volume.

/3

   d. Convert the volume to in^3. *Hint: Use your conversion chart.*

/1