Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Due Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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You may complete this assignment on these pages, but if you want to use separate pieces of paper, that is OK. For **full marks:**

* Identify the 3D shape you are working with in the blank.
* Write down the formula you are using.
* Include units in your final answer, and put a box around it
1. **Calculate the volume** of each figure. ➂ each.

a) Shape: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ b) Shape: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_



 

c) Shape: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ d) Shape: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_



e) Shape: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_



2) Find the volume of the following cone. You will need to determine the height first using the Pythagorean Theorem. ➄



3) You are at the store buying an iced tea for yourself. You have two choices illustrated below. They each cost $3, so you want to buy the one with the largest volume.

Which will you buy? Explain your choice fully. ➄

Option 1: Arizona Tea Option 2: Peace Tea

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4) The following steps will help you find the volume of the prism given below:



a) Find the area of the pentagon base. Mr. Smith has redrawn it for you below. Hint: The pentagon base is made up of a rectangle, with a triangle sitting on top of it! ➂



b) Use $V=A\_{base}×height$ to find the volume of the prism. ➁