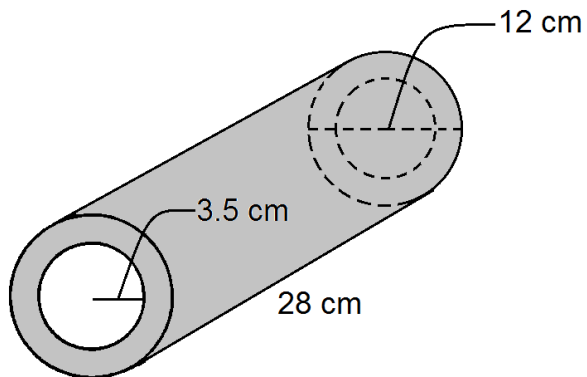


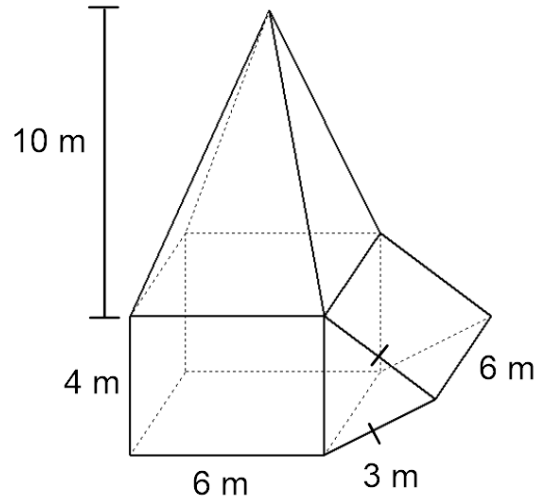
Problem Solving with 3-Dimensional Solids

1. Use the section of PVC pipe below to answer the following questions.



- a. What volume of water can the section of pipe hold?
- b. What volume of plastic is required to make the section of pipe?
- c. What is the inside surface area of the section of pipe (the surface that water inside the pipe will be touching)?
- d. What is the outside surface area of the section of pipe (including both ends)?

2. It's an Itzakadoozie! Use the diagram below to answer the following questions. You may want to sketch some net diagrams to keep your work organized.



- a. Determine the total volume of the Itzakadoozie.
- b. Determine the total outer surface area of the Itzakadoozie.