

Connecting the Standards for Mathematical Practices to Instructional Tasks

Task:

- Complete the problem shown below.
- Share your approach and outcome to the problem with the members of your group.
- Identify the standards to which this problem has connections.
- Discuss how this problem might be used within a lesson that targets the identified standards. (motivation, review, enrichment,...)
- Identify the Standards for Mathematical Practice to which this problem has connections
- Discuss how using this problem might help students to become more proficient with the identified Standards for Mathematical Practice.

Problem

A major soft drink company is holding a contest to design new container for its newest product (e.g., Coke or Pepsi). Contestants are required to design a container that will hold 500 ml (Hint: 1 milliliter = 1 cubic centimeter) of the new beverage. Determine and defend your choice of a container that is most cost effective, aesthetically pleasing, and practical. Choose one of the following 5 options: Cylinder, pyramid, cone, sphere or a rectangular solid.

Work

<i>Solution</i>	
<i>Content Standards</i>	
<i>Rationale for the selection</i>	
<i>How might this problem be used in a lesson?</i>	
<i>Standards for Mathematical Practice</i>	
<i>Rationale for the selection</i>	