

Unit 2 Review: Measurement and Geometry

Example 1: Mathew is constructing a rectangular prism with volume exactly 729 cubic inches. It will have the least possible surface area.

- a) Describe the prism. What will be its dimensions?
- b) What will be the surface area?

Example 2: Jude is designing a plush activity toy for a baby. The toy will be a rectangular prism with surface area of 864 cm².

- a) Determine the maximum volume of the toy.
- b) What are the dimensions of the toy with maximum volume?

Example 3: Determine the dimensions of the cylinder with maximum volume that can be made with 950 cm² of aluminum.

Example 5: a) 175 milliliters to liters
b) 22 kilograms to pounds

Example 4: a) Determine the least amount of aluminum required to construct a cylindrical can with a capacity of 978 mL. Round to the nearest square centimetre.
Note that 1milliliter = 1cm³.

Homework: Pg. 262: #7-11