

Challenge Problems

13.5

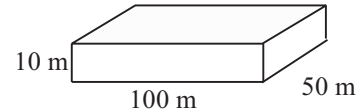
NAME _____

Module 13 Perimeter, Area, and Volume
Lesson 5 Volume: Prisms, Cylinders, and Spheres

Set 1

1

The length of guttering needed on this building equals the perimeter of the roof. The area that needs paint equals the lateral area. The volume that needs air conditioning equals the volume. Find the perimeter, lateral area, and volume of the building.



2

How many different rectangular prisms can be built out of 24 cubic blocks? Explain.

Set 2

1

How many marbles with a diameter of 25 millimeters fit into a cylindrical tube with a height of 30 centimeters?

2

What is the smallest cubical box that fits around a volleyball with a circumference of 26 inches?

Additional Work Area