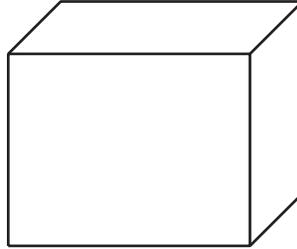
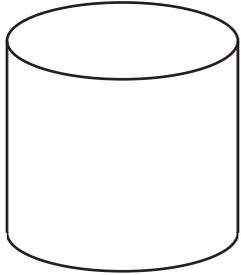


Unit 5 Lesson 9: Cylinder Volumes

1 The Same But Different (Warm up)

Student Task Statement

Here are two solids.

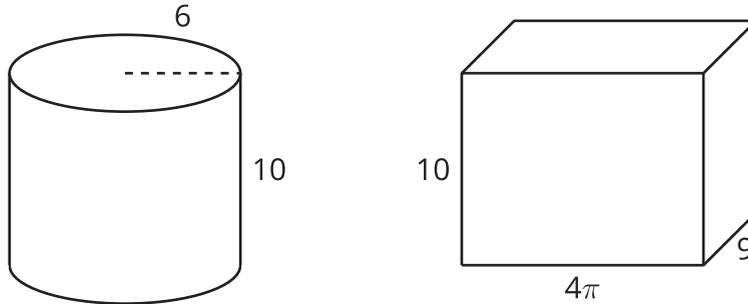


1. What information would you need to calculate the volume of each solid?
2. What is the same and different about how you would find the volume of each solid?

2 Water Transfer

Student Task Statement

Here are two containers. All measurements are in centimeters.



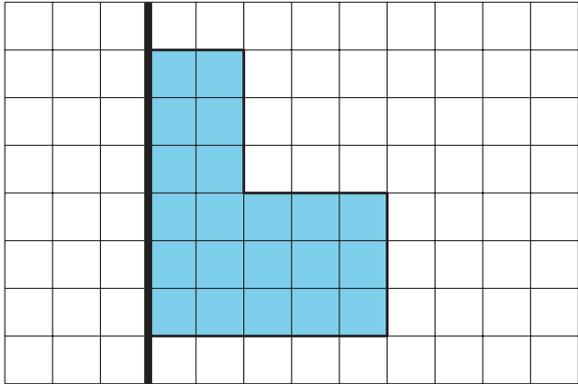
1. Suppose the prism contains water that reaches a height of 1 cm.
 - a. Draw a representation of this situation.
 - b. The water is poured from the prism into the cylinder. What is the height of the water in the cylinder? Explain your reasoning.
2. Suppose the prism contained water that reached a height of 3 cm instead of 1 cm. If the water were poured into the empty cylinder, what would the height of the water in the cylinder be?

3 Revisiting Rotation

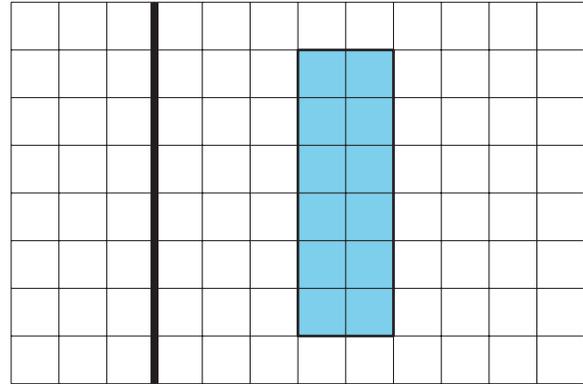
Student Task Statement

Suppose each two-dimensional figure is rotated around the vertical axis shown. Each small square in the grid represents 1 square centimeter.

A



B



For each solid:

1. Either sketch or describe in words the three-dimensional solid that would form.
2. Find the solid's volume.

Images for Activity Synthesis







