

STUDY LINK
11•3

Volume of Cylinders



Use these two formulas to solve the problems below.

Formula for the Volume of a Cylinder

$$V = B * h$$

where V is the volume of the cylinder,
 B is the area of the cylinder's base, and
 h is the height of the cylinder.

Formula for the Area of a Circle

$$A = \pi * r^2$$

where A is the area of the circle and r is
the length of the radius of the circle.

1. Find the smallest cylinder in your home. Record its dimensions, and calculate its volume.

radius = _____ height = _____

Area of base = _____ Volume = _____

2. Find the largest cylinder in your home. Record its dimensions, and calculate its volume.

radius = _____ height = _____

Area of base = _____ Volume = _____

3. Write a number model to estimate the volume of:

a. Your toaster _____

b. Your television _____

4. Is the volume of the largest cylinder more or less than the volume of your toaster? _____

About how much more or less? _____

5. Is the volume of the largest cylinder more or less than the volume of your television set? _____

About how much more or less? _____

Practice

6. $6\frac{1}{3} * \frac{2}{5} =$ _____

7. $10\frac{6}{8} * \frac{1}{2} =$ _____

8. $4 - 2.685 =$ _____