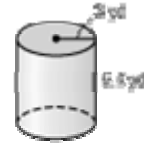


Lesson 11-10

Example 1 Find the Volume of a Cylinder

Find the volume of the cylinder. Round to the nearest tenth.



$$V = \pi r^2 h$$

Volume of a cylinder

$$V = \pi(3)^2(6.4)$$

Replace r with 3 and h with 6.4.

$$V = 180.9557368$$

Use a calculator.

The volume of the cylinder is about 181.0 cubic yards.

Example 2 Find the Volume of a Real-Life Object

Find the volume of a cylinder-shaped bucket that has a diameter of 10 inches and a height of 12 inches.

$$V = \pi r^2 h$$

Volume of a cylinder

$$V = \pi(5)^2(12)$$

Replace r with 5 and h with 12.

$$V \approx 942.5$$

Simplify.

The volume of the bucket is about 942.5 cubic inches.