

Name: key

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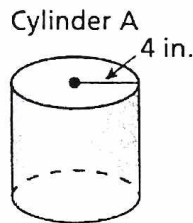
Period:

HW #11-9

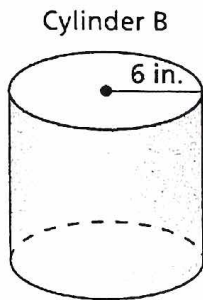
1. A cylindrical container with a radius of 8 cm is filled to a height of 10 cm with sulfuric acid. The density of sulfuric acid is 1.84 grams per cubic centimeter. What is the mass of the sulfuric acid to the nearest gram?

3700 grams

2. The cylinders are similar. Find the volume of cylinder B. Exact answer.



$$V = 112\pi \text{ in.}^3$$

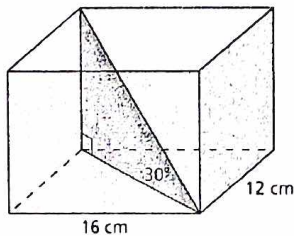


$$378\pi \text{ in.}^3$$

3. An aquarium shaped like a rectangular prism has a length of 24 in, a width of 12 in, and a height of 18 in. You fill the aquarium half full with water. When you submerge a rock in the aquarium, the water level raises 0.5 inches. Find the volume of the rock.

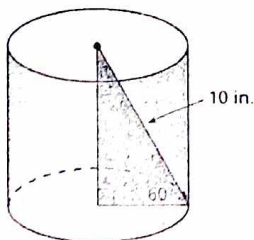
$$144 \text{ in.}^3$$

4. Find the volume of the right prism. Exact answer.



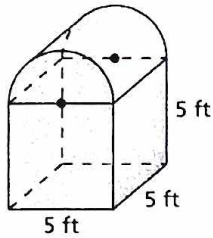
$$1280\sqrt{3} \text{ cm}^3$$

5. Find the volume of the right cylinder. Exact answer.



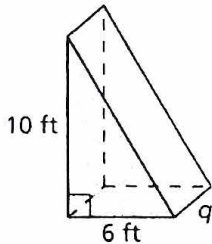
$$125\sqrt{3}\pi \text{ in.}^3$$

6. Find the volume of the composite solid. Round to hundredth.



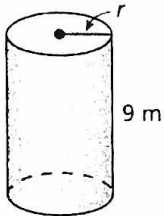
$$\approx 174.09 \text{ ft}^3$$

7. Find the missing dimension of the solid below whose volume is 120 ft^3 .



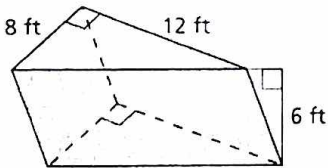
$$4 \text{ ft}$$

8. Find the missing dimension of the solid below whose volume is 254.5 m^3 . Round to hundredth.



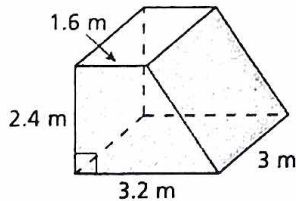
$$\approx 3.00 \text{ m}$$

9. Find the volume of the prism.



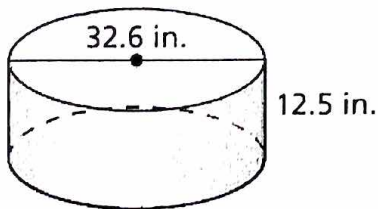
$$288 \text{ ft}^3$$

10. Find the volume of the prism.



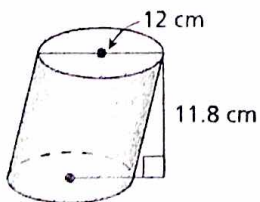
$$17.28 \text{ m}^3$$

11. Find the volume of the cylinder. Exact answer.



$$3321.125 \pi \text{ in}^3$$

12. Find the volume of the cylinder. Exact answer.



$$424.8 \pi \text{ cm}^3$$