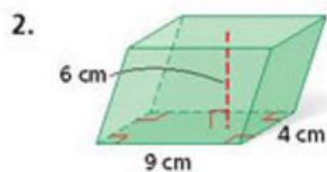


Day 2 Volume of Prisms and Cylinders HW

pg. 753: 2, 5-6, 8, 10, 15-16, 21, 27-28

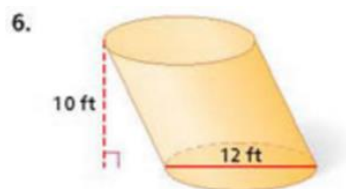
Find the volume.



5. **Food** The world's largest ice cream cake, built in New York City on May 25, 2004, was approximately a 19 ft by 9 ft by 2 ft rectangular prism. Estimate the volume of the ice cream cake in gallons. If the density of the ice cream was 4.73 pounds per gallon, estimate the weight of the cake. (*Hint: 1 gallon \approx 0.134 cubic feet*)



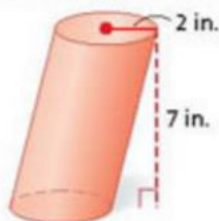
Find the volume of each cylinder. Give your answers both in terms of π and rounded to the nearest tenth.



8. a cylinder with base area $25\pi \text{ cm}^2$ and height 3 cm more than the radius

Describe the effect on the volume.

10. The dimensions are tripled.



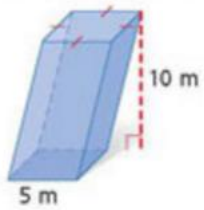
Find the volume of...

15. a square prism with a base area of 49 ft^2 and a height 2 ft less than the base edge length

16. **Landscaping** Colin is buying dirt to fill a garden bed that is a 9 ft by 16 ft rectangle. If he wants to fill it to a depth of 4 in., how many cubic yards of dirt does he need? If dirt costs \$25 per yd^3 , how much will the project cost? (*Hint: 1 $\text{yd}^3 = 27 \text{ ft}^3$*)

Describe the effect on the volume.

21. The dimensions are multiplied by $\frac{3}{5}$.



27. Find the height of a rectangular prism with length 5 ft, width 9 ft, and volume 495 ft^3 .

28. Find the area of the base of a rectangular prism with volume 360 in^3 and height 9 in.