

Question

1 2 3 4 5 6 7 8 9 10 11 12

Description

Section 8.2 - Volume and Surface Area

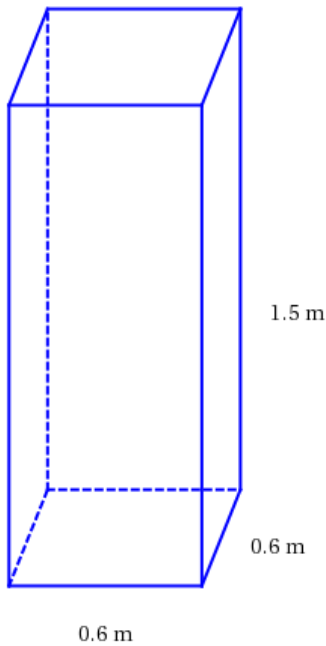
Instructions

Please work all homework questions and clearly label / place your answers in the boxes (or parenthesis) provided. If you have questions, please feel free to email me at Joshua.Patterson@tamuc.edu

1. Question Details

JMod7 8.2.002.CMI. [1643806]

Find the volume and the surface area of the figure.



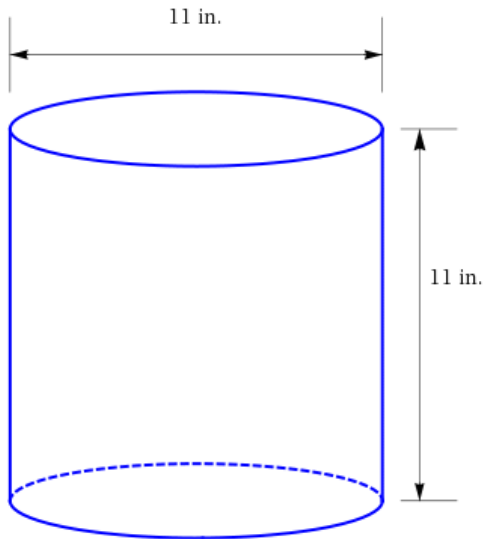
(a) the volume
 m³

(b) the surface area
 m²

2. Question Details

JMod7 8.2.003.CMI. [1643940]

Find the volume and the surface area of the figure. (Round your answers to two decimal places.)



(a) the volume

in³

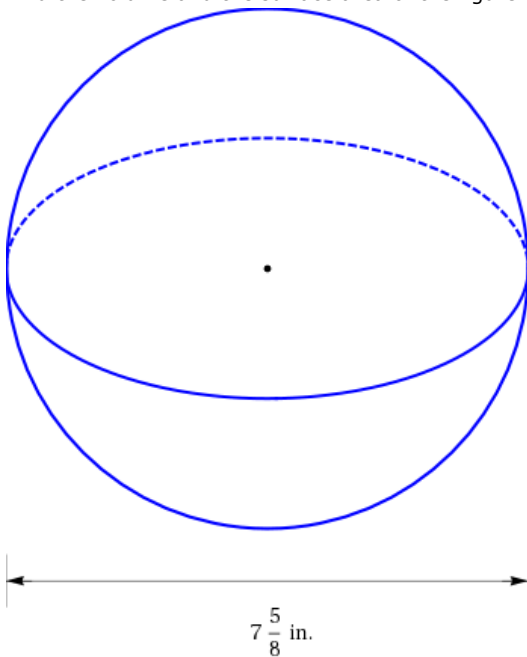
(b) the surface area

in²

3. Question Details

JMod7 8.2.006.CMI. [1643888]

Find the volume and the surface area of the figure. (Round your answers to two decimal places.)



(a) the volume

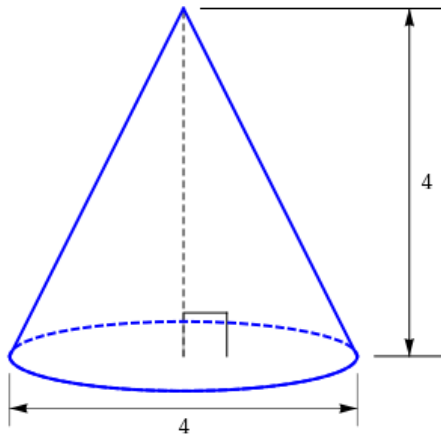
in³

(b) the surface area

in²

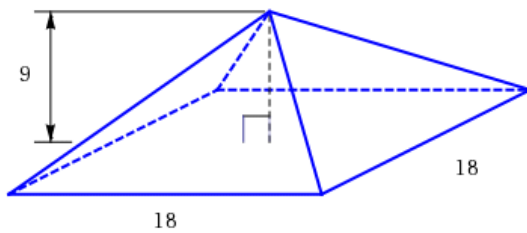
Find the volume of the figure. All dimensions are given in feet. (Round your answer to two decimal places.)

ft³



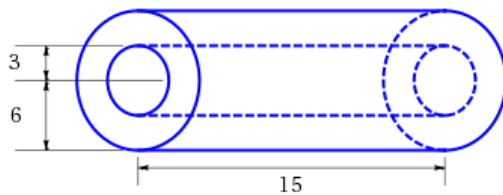
Find the volume of the figure. All dimensions are given in feet.

ft³

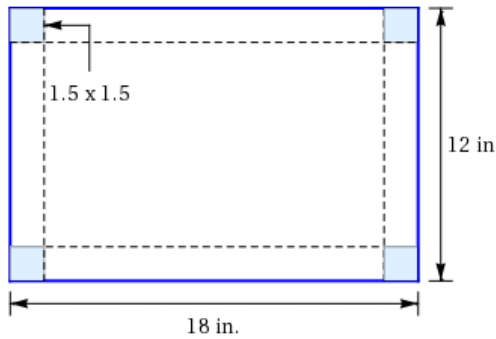


Find the volume of the figure. All dimensions are given in feet. (Round your answer to two decimal places.)

ft³



From a 12-inch-by-18-inch piece of cardboard, 1.5-inch-square corners are cut out, as shown in the figure below, and the resulting flaps are folded up to form an open box. Find the volume and the external surface area of the box.



(a) the volume

in³

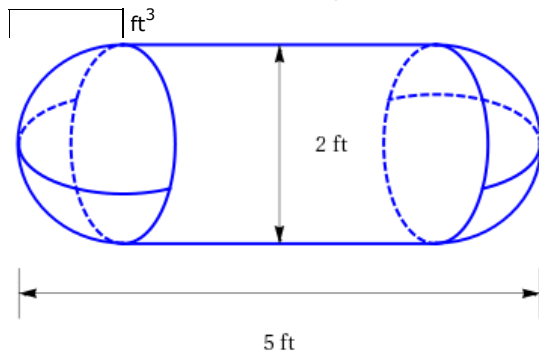
(b) the external surface area

in²

8. Question Details

JMod7 8.2.018. [1643917]

A propane gas tank consists of a cylinder with a hemisphere at each end. Find the volume of the tank if the overall length is 5 feet and the diameter of the cylinder is 2 feet, as shown in the figure. (Round your answer to two decimal places.)



ft³

9. Question Details

JMod7 8.2.019. [1643836]

A regulation baseball (hardball) has a circumference of 9 inches; a regulation softball has a circumference of 12 inches. (Round your volumes and surface areas to two decimal places, and round your percentages to the nearest whole number.)

(a) Find and compare the volumes of the two types of balls.

hardball in³

softball in³

The volume of a softball is % ---Select--- than that of a hardball.

(b) Find and compare the surface areas of the two types of balls.

hardball in²

softball in²

The surface area of a softball is % ---Select--- than that of a hardball.

10.

Que

The diameter of the earth is approximately 7,920 miles; the diameter of the planet Jupiter (the largest planet in our solar system) is approximately 88,640 miles. How many earths could fit inside Jupiter? (*HINT*: Compare their volumes. Round your answer down to the nearest whole number.)

earths

11. Question Details

JModd7 8.2.028. [1643975]

Golf balls are packaged three to a rectangular box. If the diameter of a golf ball is $1\frac{3}{4}$ inches, find the volume of the box.

(Round your answer to two decimal places.)

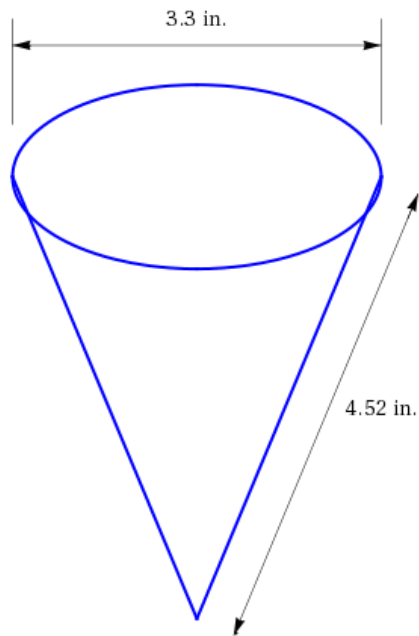
in³

12. Question Details

JModd7 8.2.034. [1643839]

The diameter of a conical paper cup is 3.3 inches, and the length of the sloping side is 4.52 inches, as shown in the figure. How much water will the cup hold? (Round your answer to two decimal places.)

in³



Assignment Details