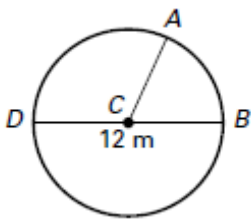
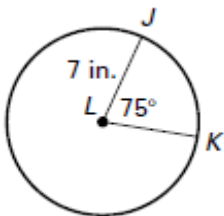


Find the indicated measure.

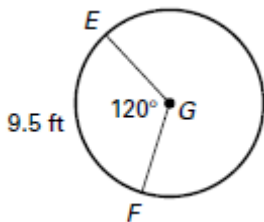
1. Circumference



2. Length of \widehat{JK}

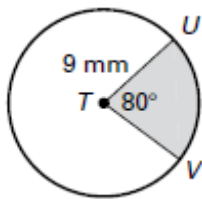


3. Radius

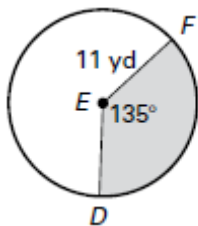


Find the area of the shaded region.

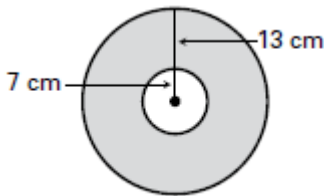
4.



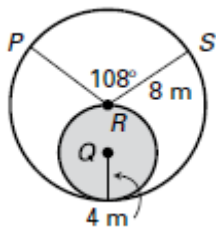
5.



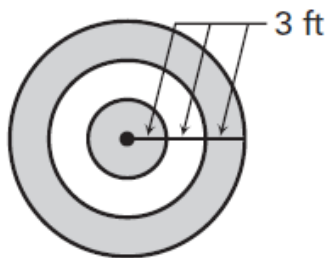
6.



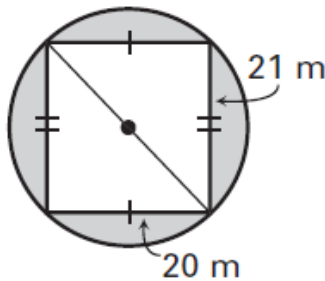
7.



8.

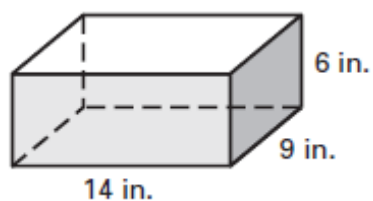


9.

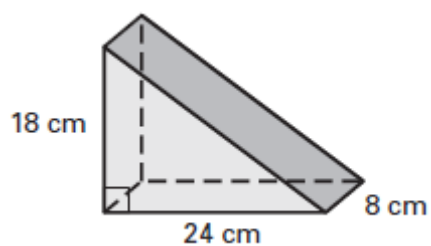


Find the volume of the figure. Round your answer to two decimal places, if needed.

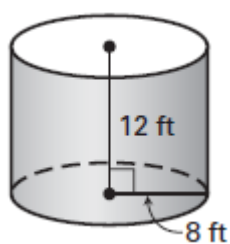
1.



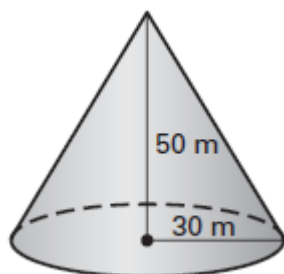
2.



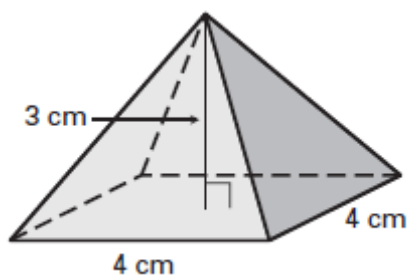
3.



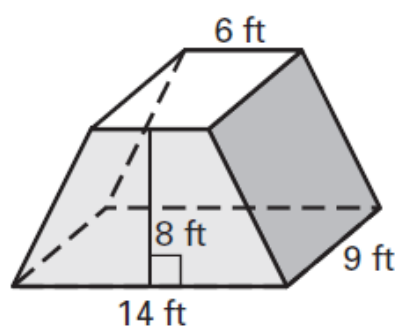
4.



5.

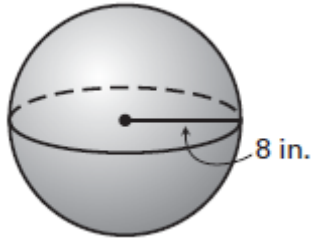


6.

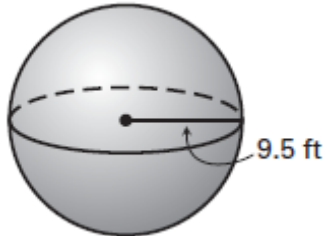


Find the surface area and volume of the sphere. Round your answers to two decimal places.

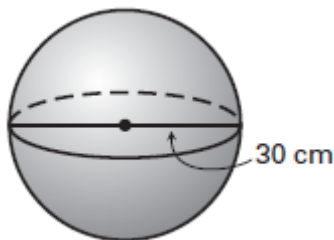
1.



2.



3.

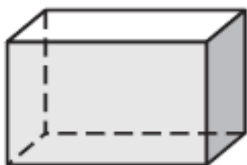


Solid A (shown) is similar to Solid B (not shown) with the given scale factor of A to B. Find the surface area S and volume V of Solid B.

4. Scale factor 1 : 2

$$S = 120 \text{ ft}^2$$

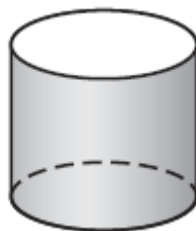
$$V = 60 \text{ ft}^3$$



5. Scale factor 1 : 4

$$S = 180\pi \text{ cm}^2$$

$$V = 400\pi \text{ cm}^3$$



6. An aquarium has a width of 48 inches, a length of 30 inches, and a depth of 6 inches. Another aquarium has a width of 80 inches and a depth of 10 inches. The two aquariums are similar. What is the length of the larger aquarium?

Answers

First Page:

1. $12\pi m = 37.7 m$
2. 9.16 in.
3. 4.54 ft.
4. $18\pi \text{ mm}^2 = 56.55 \text{ mm}^2$
5. 142.55 yd^2
6. $351\pi \text{ cm}^2 = 1103 \text{ cm}^2$
7. $16\pi \text{ m}^2 = 50.27 \text{ m}^2$
8. $54\pi \text{ ft}^2 = 169.65 \text{ ft}^2$
9. 240.5 m^2

Second Page:

1. 756 in.^3
2. 1728 cm^3
3. $768\pi \text{ ft}^3 = 2412.74 \text{ ft}^3$
4. $15000\pi \text{ m}^3 = 47123.89 \text{ m}^3$
5. 16 cm^3
6. 720 ft^3

Third Page:

1. $\text{S.A.} = 256\pi \text{ in}^2 = 804.25 \text{ in}^2$
 $V = 2144.66 \text{ in}^3$
2. $\text{S.A.} = 361\pi \text{ ft.}^2 = 1134.11 \text{ ft.}^2$
 $V = 3591.36 \text{ ft.}^3$
3. $\text{S.A.} = 900\pi \text{ cm}^2 = 2827.43 \text{ cm}^2$
 $V = 4500\pi \text{ cm}^3 = 14137.17 \text{ cm}^3$