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## Practice B

For use with pages 759-765

Find the surface area and the volume of the sphere.
1.

2.

3.


Complete the table below. Leave your answers in terms of $\boldsymbol{\pi}$.
4.

| Radius <br> of sphere | Circumference <br> of great circle | Surface area <br> of sphere | Volume <br> of sphere |
| :---: | :---: | :---: | :---: |
| 10 mm | - | - | - |
|  | $36 \pi \mathrm{in}$. | - | - |
| - | - | $2304 \pi \mathrm{~cm}^{2}$ | - |
| - | - | - | $\frac{500}{3} \pi \mathrm{yd}^{3}$ |

Find the surface area of the solid and the volume of the solid. The cylinder and cone are right. Round your results to two decimal places.
8.

9.


## Tennis Ball In Exercises 10 and 11, consider a tennis ball with a radius of 3.2 centimeters.

10. Find the surface area and volume of the tennis ball.
11. Tennis balls are often sold in a can of three. Assuming that the balls are packed tightly so that they touch the lateral side and the bases, determine the amount of volume in the can that is not taken up by the tennis balls.


Earth In Exercises 12 and 13, Earth has an equatorial radius of approximately 3963 miles.
12. Seventy percent of Earth's surface is covered with water. Find the approximate surface area of Earth that is water.
13. Find the volume of Earth.


