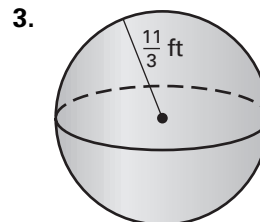
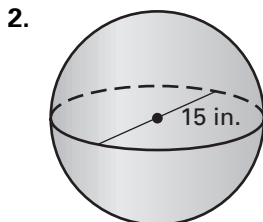
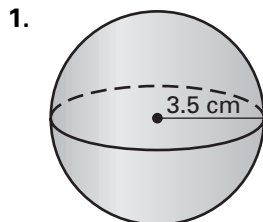


Practice C

For use with pages 759–765

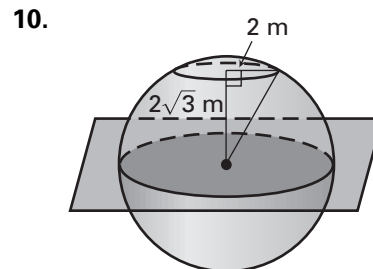
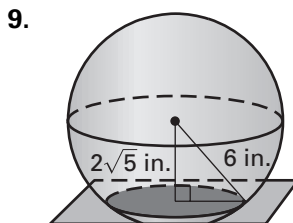
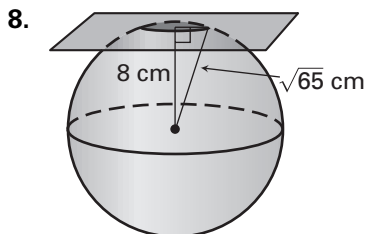
Find the surface area and the volume of the sphere. Round your answers to two decimal places.



Complete the table below. Leave your answers in terms of π .

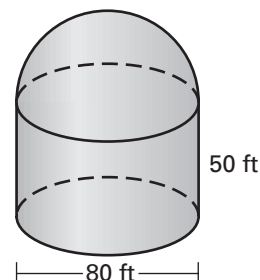
	Radius of sphere	Circumference of great circle	Surface area of sphere	Volume of sphere
4.	15 cm	_____	_____	_____
5.	_____	26π ft	_____	_____
6.	_____	_____	4096π in. ²	_____
7.	_____	_____	_____	$\frac{1372}{3}\pi$ yd ³

Find the area of the intersection of the sphere and plane. Leave your answers in terms of π .



11. **Storage Tank** A grain storage tank shown at the right is in the shape of a cylinder covered by a half sphere. If the height of the cylinder is 50 feet and it is 80 feet in diameter, find the total surface area (including the base) and volume of the tank.

12. **Box** How much extra space will you need to fill the inside of a box with dimensions $44\text{ cm} \times 44\text{ cm} \times 44\text{ cm}$ after placing a bowling ball inside with a radius of 21.8 cm?



13. **Rubber Ball** A rubber shell filled with air forms a rubber ball. The shell's outer diameter is 65 millimeters, and its inner diameter is 56 millimeters. Find the volume of rubber used to make the ball. Round your answer to the nearest cubic centimeter.