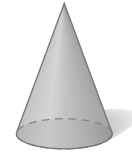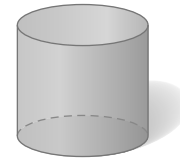Chapter 10 (p. 481)

cone

A three-dimensional figure with a circular base lying in one plane plus a vertex not lying on that plane. The remaining surface of the cone is formed by joining the vertex to points on the circle by line segments.
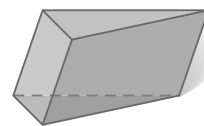
Chapter 10 (p. 481)

cylinder

A three-dimensional figure with two parallel congruent circular bases. The third surface of the cylinder consists of all parallel circles of the same radius whose centers lie on the segment joining the centers of the bases.
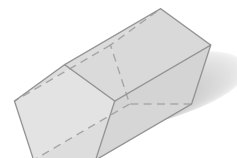
Chapter 10 (p. 480)

polyhedron

A three-dimensional figure in which all the surfaces or faces are polygons.
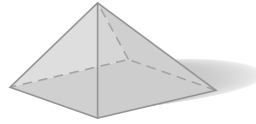
Chapter 10 (p. 480)

prism

A three-dimensional figure with two congruent parallel polygonal bases. The remaining edges join corresponding vertices of the bases so that the remaining faces are rectangles.
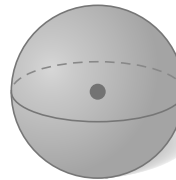
Chapter 10 (p. 480)

pyramid

A three-dimensional figure with a polygonal base lying in one plane plus one additional vertex not lying on that plane. The remaining edges of the pyramid join the additional vertex to the vertices of the base.
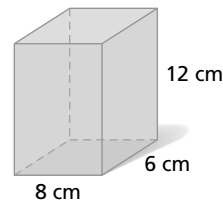
Chapter 10 (p. 508)

sphere

A three-dimensional figure with all points the same distance from the center.

Chapter 10 (p. 498)

surface area

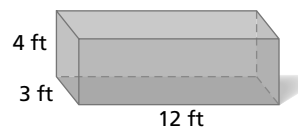The sum of the areas of the faces, or surfaces, of a three-dimensional figure.

12 cm

6 cm

8 cm

Surface area = 2(8)(12) + 2(8)(6) + 2(12)(6) = 432 cm^2

Chapter 10 (p. 485)

volume

The number of cubic units needed to fill a given space.

4 ft

3 ft

12 ft

Volume = 3 · 4 · 12 = 144 ft^3