

Volume, Lateral and Surface Areas

Find the volume of each figure. Round your answers to the nearest whole, if necessary.

- 1) A sphere with a diameter of 12.8 km. 2) A sphere with a diameter of 14 cm.

Find the lateral area and surface area of each figure. Round your answers to the nearest hundredth, if necessary. Leave your answers in terms of π for answers that contain π .

- 3) A sphere with a diameter of 18 mi. 4) A pentagonal prism 7 yd tall with a regular base measuring 13 yd on each edge and an apothem of length 8.9 yd.

Find the volume of each figure. Round your answers to the nearest hundredth, if necessary. Leave your answers in terms of π for answers that contain π .

- 5) A cone with radius 13 cm and a height of 26 cm.
- 6) A pentagonal pyramid 15 yd tall with a regular base measuring 19 yd on each side and an apothem of length 13.1 yd.
- 7) A square pyramid measuring 11 mi along each edge of the base with a height of 14 mi.
- 8) A prism 11 mi tall with a right triangle for a base with side lengths 8 mi, 15 mi, and 17 mi.