

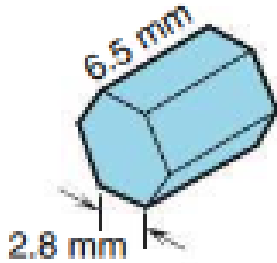
Use the formulas in the section Notes to answer the following questions. In addition, the area of a hexagon is given below.

Area of a Regular Hexagon

Area, $A = \frac{3a^2\sqrt{3}}{2} \approx 2.598a^2$



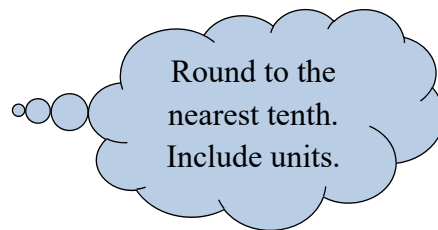
1. Find the volume, lateral surface area, and total surface area for this right prism. Round to the nearest tenth if needed. Include units.



Volume: _____

Lateral surface area: _____

Total surface area: _____



2. Dirt is cut 3 ft deep from a section of land in the shape of a rectangle, 30 ft by 20 ft. The dirt is used to fill in a hole that is 50 ft by 20 ft by 6 inches. How much dirt is left over after filling the hole? Include units.