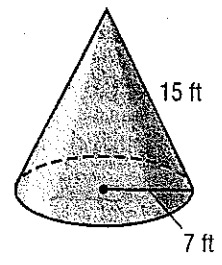


7-8

Practice: Word Problems

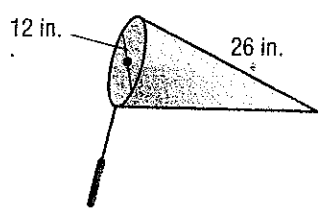
Surface Area of Pyramids and Cones

1. ROOFS A farmer is planning to put new roofing material on the conical roof of his silo shown below. Calculate the number of square feet of roofing material needed. Round to the nearest tenth.

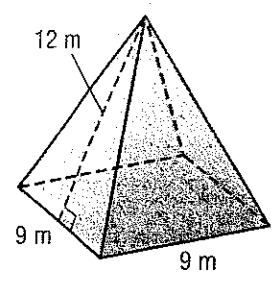


2. ROOFS Refer to Exercise 1. If the roofing material costs \$1.45 per square foot, how much will it cost to put new roofing material on the silo? Round to the nearest cent.

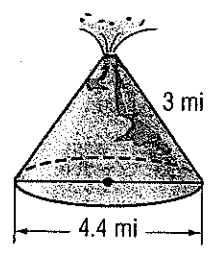
3. HOBBIES When the butterfly net shown below is fully extended, it forms the shape of a cone with a diameter of 12 inches and a slant height of 26 inches. Calculate the amount of mesh material needed to make the butterfly net.



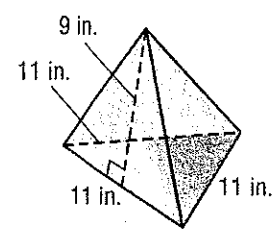
4. HORTICULTURE The local college has a greenhouse that is shaped like a square pyramid, as shown below. The lateral faces of the greenhouse are made of glass. Find the surface area of the glass on the greenhouse.



5. VOLCANOES Find the surface area of the cinder-cone volcano shown below.

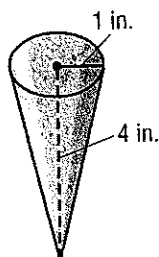


6. COSTUMES The top of a costume hat is shaped like a triangular pyramid, as shown below. How much black felt is needed to cover the sides of the pyramid?

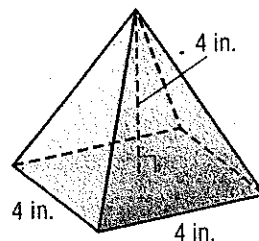


7-6**Practice: Word Problems****Volume of Pyramids and Cones**

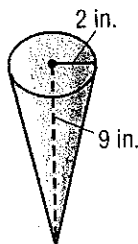
1. **DESSERT** Find the volume of the ice cream cone shown below. Round to the nearest tenth if necessary.



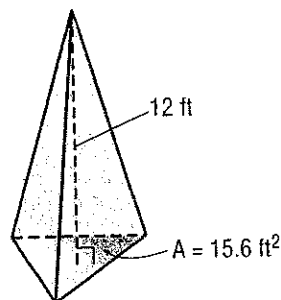
2. **SOUVENIRS** On a trip to Egypt, Myra bought a small glass pyramid as a souvenir. Find the volume of the glass used to make the pyramid. Round to the nearest tenth.



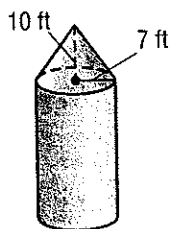
3. **AUTO REPAIR** A funnel used to fill the transmission on a car is shown below. Find the volume of the funnel. Round to the nearest tenth.



4. **ART** An artist created a commemorative marker in the shape of a triangular pyramid. Find the volume of the stone used to make the marker. Round to the nearest tenth.



5. **FARMING** The top of a silo is a cone, as shown in the figure. Find the volume of the cone. Round to the nearest tenth.



6. **CONSTRUCTION** The attic of a house is shaped like a rectangular pyramid, as shown. Calculate the volume of the attic.

