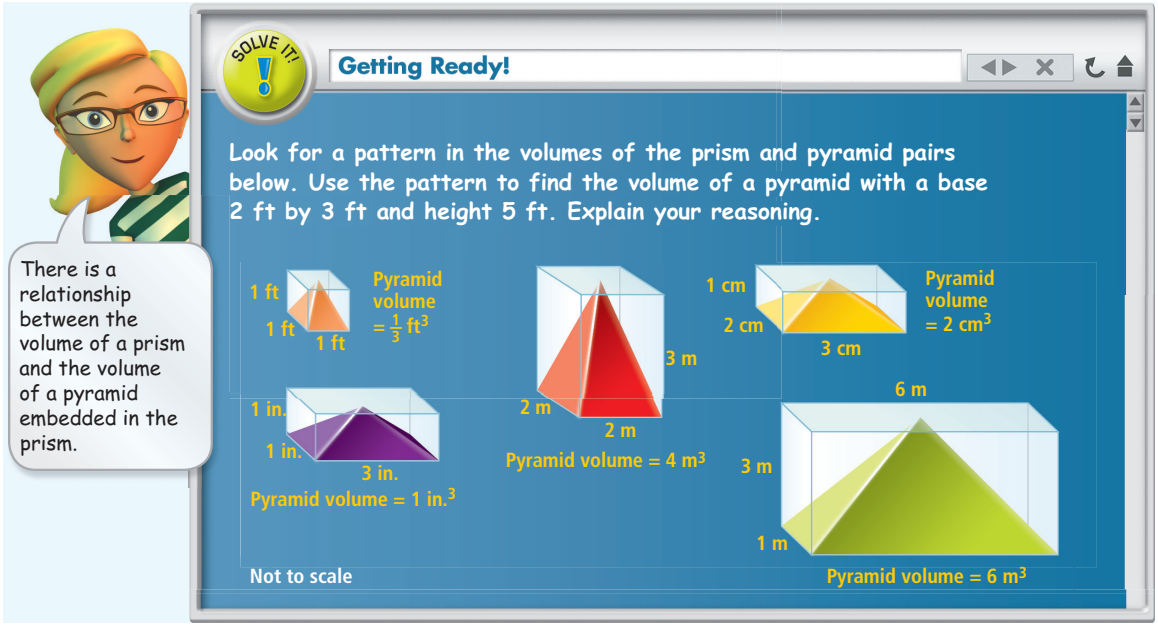
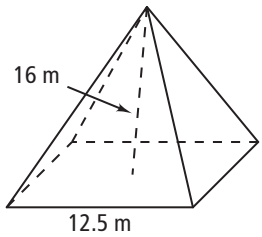
11-5 Solve It!



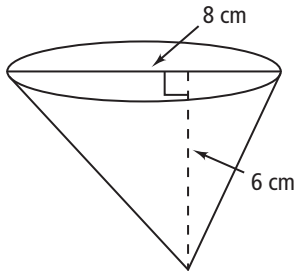
11-5 Lesson Quiz

1. What is the volume of a square pyramid with sides that are 12.5 m long and a height of 16 m?



2. What is the volume of a traffic cone that has a height of 2.4 ft and a diameter of 1.25 feet?

3. Do you UNDERSTAND? What is the volume of the oblique cone? Give your answer in terms of π.



Answers

Solve It!

Pattern: From the examples shown, the pyramids and a prism have the same base and the same height, and the volume of each pyramid is one-third the volume of its corresponding prism. Based on this pattern, the volume of the pyramid that fits in a prism with base 2 ft by 3 ft with height 5 ft will be $\frac{1}{3}(30)$ or 10 ft^3.

Lesson Quiz

1. $833\frac{1}{3}$ m^3
2. about 1 ft^3
3. 32π cm^3