**Unit 7: Modeling with 3-D Figures Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Day 5 Volume of a Pyramid and Cone (PH 10-6) Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_Hour: \_\_\_**

**Review:** Use the Pythagorean Theorem to find the value of the variable.

**a. b.**

A ***pyramid*** is a figure that has a polygon for its base and triangles for each of its sides.



 **Volume of a Pyramid**

 **Volume =** $\frac{1}{3}$ **Base Area ∙ Height**

 **V =**$\frac{1}{3} $**BH**

**Example 1:** Find the volume of the rectangular pyramid.



**Example 2:** Find the volume of a square pyramid with base edges 15 cm and height 22 cm.

***Slant height*** in a pyramid or a cone is the distance from the apex to the base along a side.

**Example 3:** Find the volume of a square pyramid with base edges 16 m and slant height 17 m.



 **Volume of a Cone**

 **V =**$\frac{1}{3} $**B ∙ H**

 **V =**$\frac{1}{3} $**πr2 ∙H**

**Example 4:** Find the volume of the cone in terms of π.

**Example 5:** An ice cream cone is 7 cm tall and 4 cm in diameter. About how much ice cream can fit entirely inside the cone? Find the volume to the nearest whole number.

**Homework:** Practice 10-6 Worksheet