Unit 4: Measuring Prisms and Cylinders

Name: \_\_\_\_\_

## 4.6 Volume of a Right Triangular Prism - Worksheet



2. A triangular prism has length 15 cm. Each triangular face has base 7 cm and height 9 cm. Find the volume of the prism.

distance b/t atriangles.  

$$V = Ah$$
  
 $= \left(\frac{bh}{a}\right) \times h$   
 $= \left(\frac{1 \times 9}{a}\right) \times 15$   
 $= 31.5 \times 15$   
 $= 47a.5 \text{ cm}^3$ 

**3.** John's attic is shaped like a right triangular prism with length 12 m. The triangular bases are isosceles triangles with base 10 m and height 4 m. What is the volume of the attic?

- 4. A package in the shape of a triangular prism has volume 225 cm<sup>3</sup>. Its length is 15 cm.
  - a) What is the area of the triangular base?
  - b) Describe one possible triangular base.



