VOLUME OF TRIANGULAR PRISMS

Name: _____ Class: _____ Due Date: _____

Family Member Signature: _____

Objective: To practice determining the volume of triangular prisms.

Necessary Information:

Students have learned that a triangular prism is just a stack of triangles. If we know the area of one triangle, we can multiply that by how tall (or long) the prism is to find the volume.
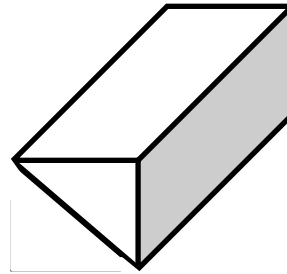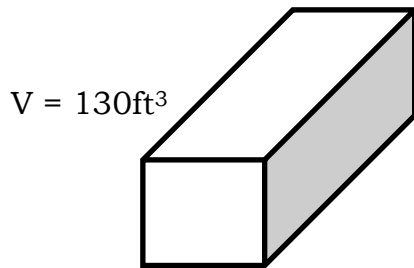
$$A_{triangle} = b \times h \div 2 \qquad\qquad V_{triangular\ prism} = A_{triangle} \times h_{prism}$$
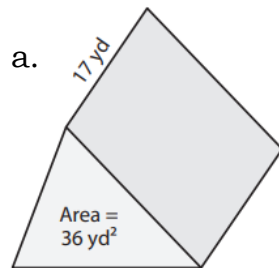
Calculators are allowed.

Practice Section:

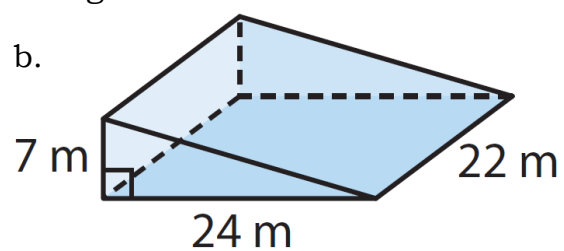1. If the volume of the rectangular prism is 130ft³, what is the volume of the related triangular prism?

V = 130ft³

V = _____

2. Determine the volume of each of the following.

a.

17 yd

Area = 36 yd²

A_{base} = _____

h_{prism} = _____

V_{prism} = _____

b.

7 m

24 m

22 m

A_{base} = _____

h_{prism} = _____

V_{prism} = _____

c.

4 ft
5 ft
6 ft
9 ft

A_{base} = _____

h_{prism} = _____

V_{prism} = _____

d.

20 cm
16 cm
10 cm
12 cm
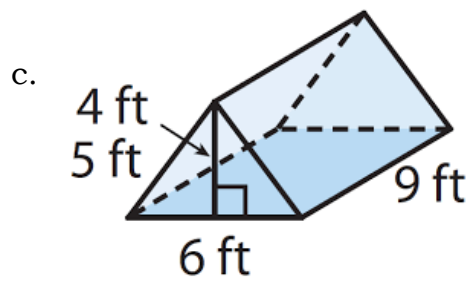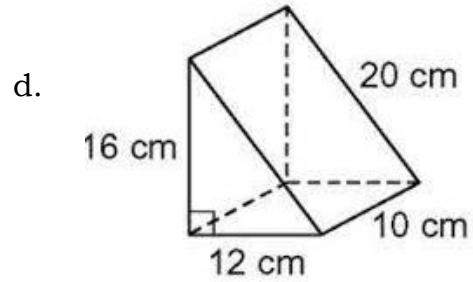
A_{base} = _____

h_{prism} = _____

V_{prism} = _____

3. Put numbers on the triangular prism so that the volume is 24 m³.
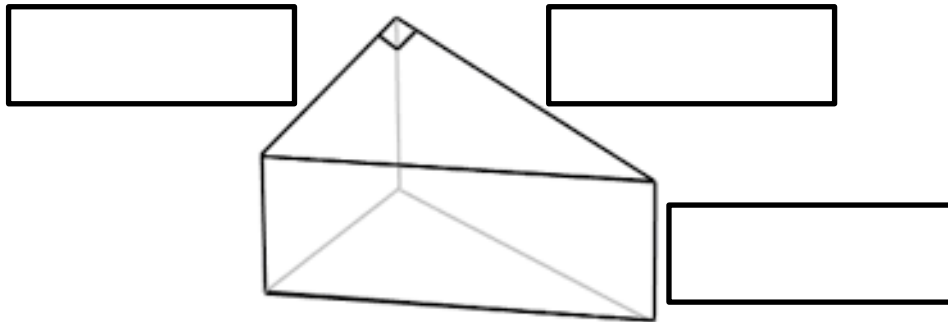
In Your Real World:

With a family member, find the volume of this 4.5 kg bar of chocolate!

A_{base} = _____

h_{prism} = _____

V_{prism} = _____

TOBLERONE

11 cm
78 cm
13 cm