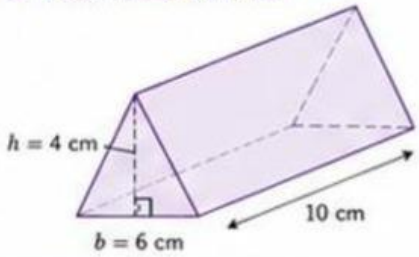
VOLUME OF PRISMS – 5 PROBLEMS

Find the volume of each prism. Show your working.

1. TRIANGULAR PRISM



Step 1: Find the area of the triangle.

$A = \frac{1}{2} \times$

$A = \frac{1}{2} \times \_\_\_\_ \times \_\_\_\_$

$A = \_\_\_\_\_ \ cm^2$

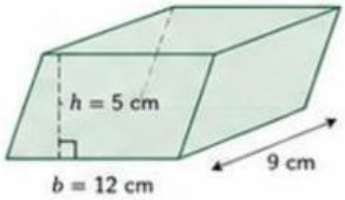
Step 2: Use the volume formula.

$V = A \times L$

$V = \_\_\_\_\_ \times \_\_\_\_\_$

$V = \_\_\_\_\_ \ cm^3$

2. PARALLELOGRAM PRISM



Step 1: Find the area of the parallelogram.

$A =$

$A = \_\_\_\_\_ \times \_\_\_\_\_$

$A = \_\_\_\_\_ \ cm^2$

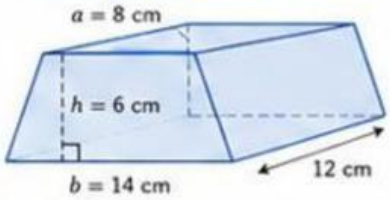
Step 2: Use the volume formula.

$V =$

$V = \_\_\_\_\_ \times \_\_\_\_\_$

$V = \_\_\_\_\_ \ cm^3$

3. TRAPEZOIDAL PRISM



Step 1: Find the area of the trapezoid.

$A = \frac{1}{2} \times$

$A = \frac{1}{2} \times (\_\_\_\_ + \_\_\_\_) \times \_\_\_\_$

$A = \_\_\_\_\_ \ cm^2$

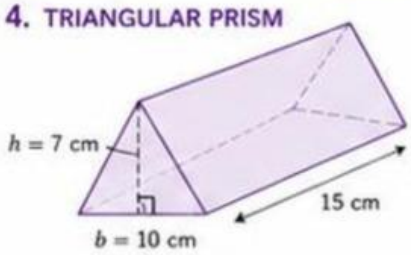
Step 2: Use the volume formula.

$V =$

$V = \_\_\_\_\_ \times \_\_\_\_\_$

$V = \_\_\_\_\_ \ cm^3$

4. TRIANGULAR PRISM



Step 1: Find the area of the triangle.

$A =$ ——

$A =$ ——

$A = \_\_\_\_\_ \ cm^2$

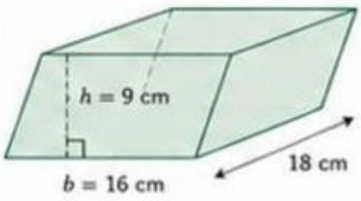
Step 2: Use the volume formula.

$V =$

$V = \_\_\_\_\_ \times \_\_\_\_\_$

$V = \_\_\_\_\_ \ cm^3$

5. PARALLELOGRAM PRISM



Step 1: Find the area of the parallelogram.

$A =$

$A = \_\_\_\_\_ \times \_\_\_\_\_$

$A = \_\_\_\_\_ \ cm^2$

Step 2: Use the volume formula.

$V =$

$V = \_\_\_\_\_ \times \_\_\_\_\_$

$V = \_\_\_\_\_ \ cm^3$

KEY POINTS

- Volume of any prism:
  $V = A_{\text{cross-section}} \times L$
- Calculate the area of the cross section first.
- Then multiply by the length (L) of the prism.

FORMULAS – VOLUME

$V = A \times L$

A = area of cross section

L = length of prism