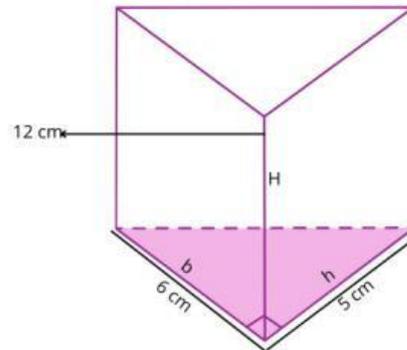# Calculating Volume:
Prisms

A **triangular prism** has a triangular base with a base of 6 cm and a height of 5 cm. The height of the prism is 12 cm.

First, we need to know the **Base Area**:

$$BA = \frac{b \times h}{2}$$

$$= \frac{6 \times 5}{2}$$

$$= \frac{30}{2}$$

$$\boxed{= 15 \text{ cm}^2}$$

Now, the **second** step: calculate the **Volume** using the base area.

$$V = BA \times H$$

$$= 15 \times 12$$
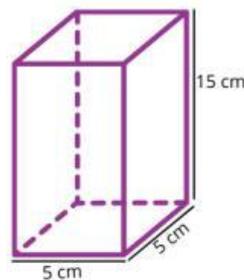
$$\boxed{= 180 \text{ cm}^3}$$

Now, it's your turn. **Calculate** both the **base area** and the **volume** of the prisms below.
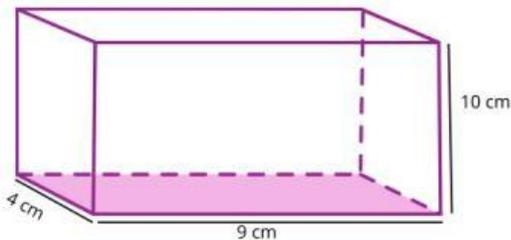
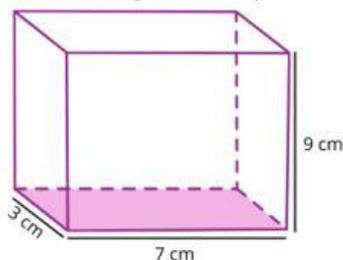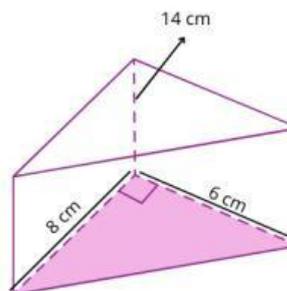|	
A **rectangular prism** has a base that is 9 cm long and 4 cm wide. The height of the prism is 10 cm. 10 cm 4 cm 9 cm What is its volume? What is its base area?	A **quadrangular prism** has a square base with 5cm sides. The height of the prism is 15 cm. 15 cm 5 cm 5 cm What is its base area? What is its volume?
A **rectangular prism** has a base that is 7 cm long and 3 cm wide. The height of the prism is 9 cm. 9 cm 3 cm 7 cm What is its base area? What is its volume?	A **triangular prism** has a base that is 8 cm long and 6 cm tall. The height of the prism is 14 cm. 14 cm 8 cm 6 cm What is its base area? What is its volume?