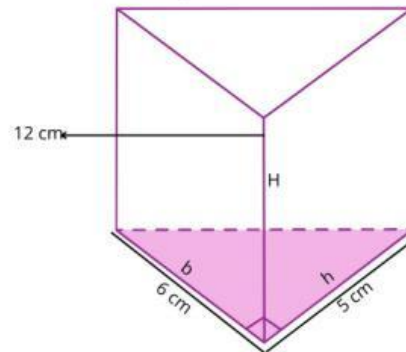


Calculating Volume: Prisms

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**:

$$\begin{aligned} BA &= \frac{b \times h}{2} \\ &= \frac{6 \times 5}{2} \\ &= \frac{30}{2} \\ &= 15 \text{ cm}^2 \end{aligned}$$

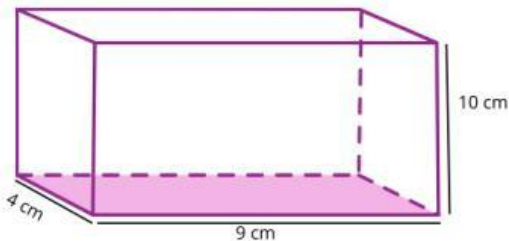


Now, the **second** step: calculate the **Volume** using the base area.

$$\begin{aligned} V &= BA \times H \\ &= 15 \times 12 \\ &= 180 \text{ cm}^3 \end{aligned}$$

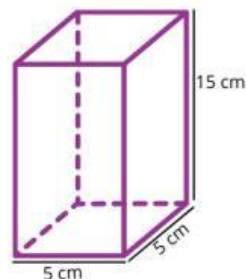
Now, it's your turn. **Calculate** both the **base area** and the **volume** of the prisms below.

A **rectangular prism** has a base that is 9 cm long and 4 cm wide. The height of the prism is 10 cm.



What is its volume? What is its base area?

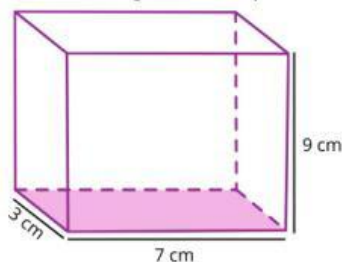
A **quadrangular prism** has a square base with 5 cm sides. The height of the prism is 15 cm.



What is its base area?

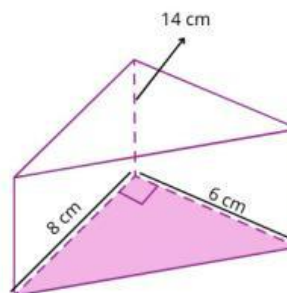
What is its volume?

A **rectangular prism** has a base that is 7 cm long and 3 cm wide. The height of the prism is 9 cm.



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.



What is its base area?

What is its volume?