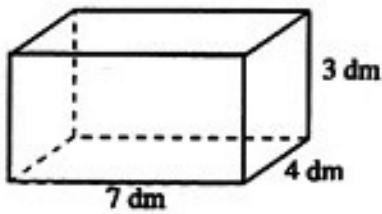


VOLUME OF PRISMS

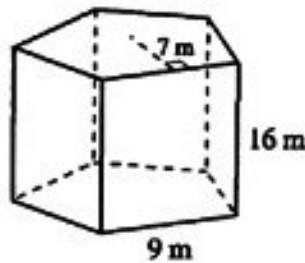
To calculate the volume of any prism, we find the area of the base (**B**) and then we multiply this number by the height (**h**) of the prism. The general formula we use for the volume of any prism is $V = Bh$. The examples below show the more specific formulas we derive from $V = Bh$ and the method of calculation for each type of prism.

RECTANGULAR PRISM



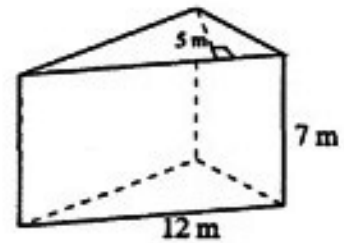
$$\begin{aligned}V &= Bh \\V &= lwh \\V &= (7)(4)(3) \\V &= 84 \text{ dm}^3\end{aligned}$$

REGULAR POLYGONAL PRISM



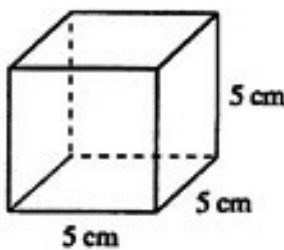
$$\begin{aligned}V &= Bh \\V &= 0.5ansh \\V &= (0.5) \cdot 7 \cdot 5 \cdot 9 \cdot 16 \\V &= 2520 \text{ m}^3\end{aligned}$$

TRIANGULAR PRISM



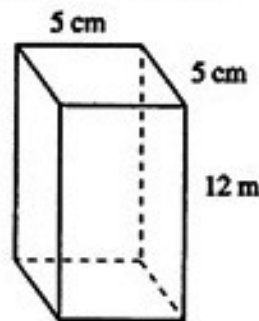
$$\begin{aligned}V &= Bh \\V &= 0.5abh \\V &= (0.5)(5)(12)(7) \\V &= 210 \text{ m}^3\end{aligned}$$

CUBE



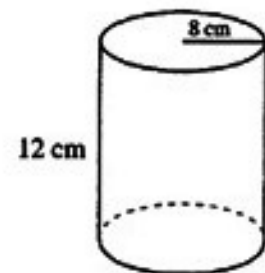
$$\begin{aligned}V &= Bh \\V &= (s^2)(s) \\V &= s^3 \\V &= (5)(5)(5) \\V &= 625 \text{ cm}^3\end{aligned}$$

SQUARE PRISM



$$\begin{aligned}V &= Bh \\V &= (s^2)h \\V &= (5)(5)(12) \\V &= 300 \text{ m}^3\end{aligned}$$

CYLINDER



$$\begin{aligned}V &= Bh \\V &= \pi r^2 h \\V &= (3.14) \cdot 8 \cdot 8 \cdot 12 \\V &= 2411.52 \text{ cm}^3\end{aligned}$$