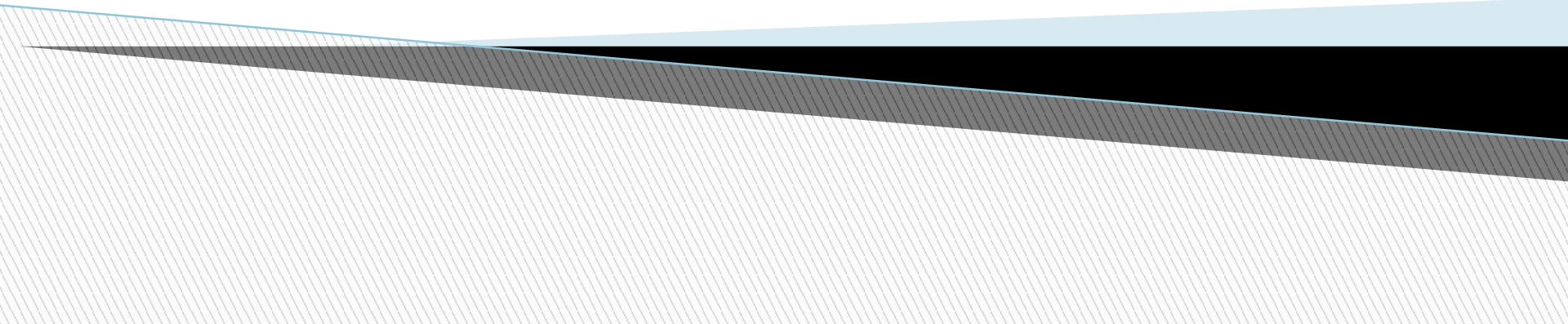


# Areas of Prisms



$$A = 2 \cdot A_{\text{base}} + A_{\text{lateral}}$$

# Right prism Area

$$A = 2 \cdot A_{\text{base}} + A_{\text{lateral}}$$

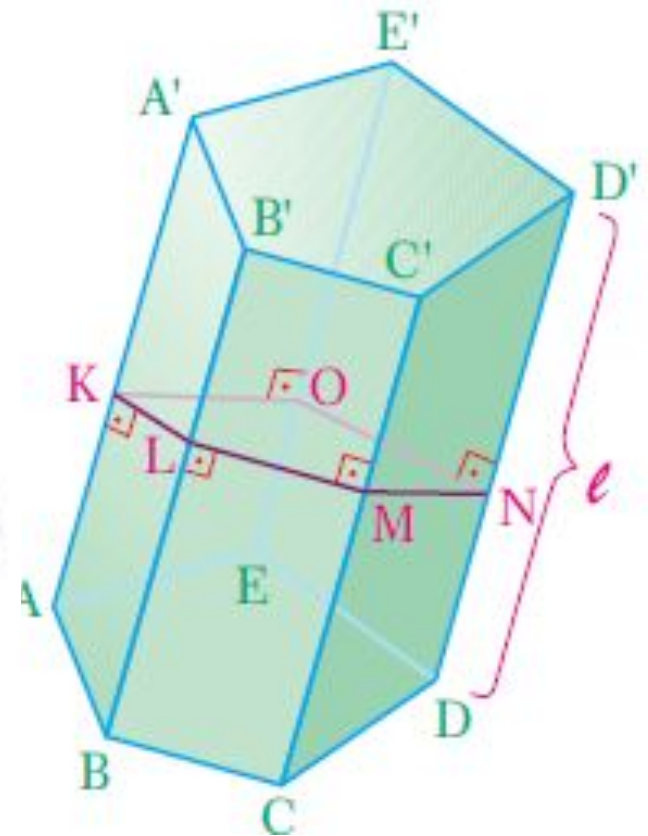
$$A_{\text{lateral}} = h \cdot P_{\text{base}}$$



# Area of an Oblique Prism

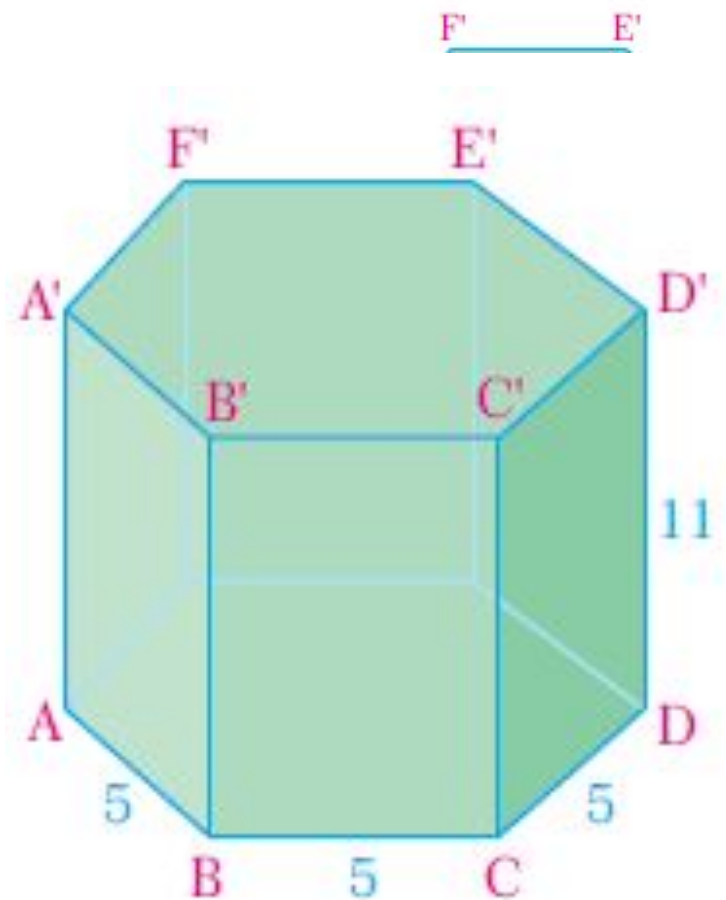
$$A_{\text{lateral}} = \ell \cdot P_{\text{right section}}$$

$$A = 2 \cdot A_{\text{base}} + \ell \cdot P_{\text{right section}}$$



# Example:

The length of a basal edge of a regular hexagonal right prism is 5 cm and the height is 11 cm. Find the total surface area of the prism.

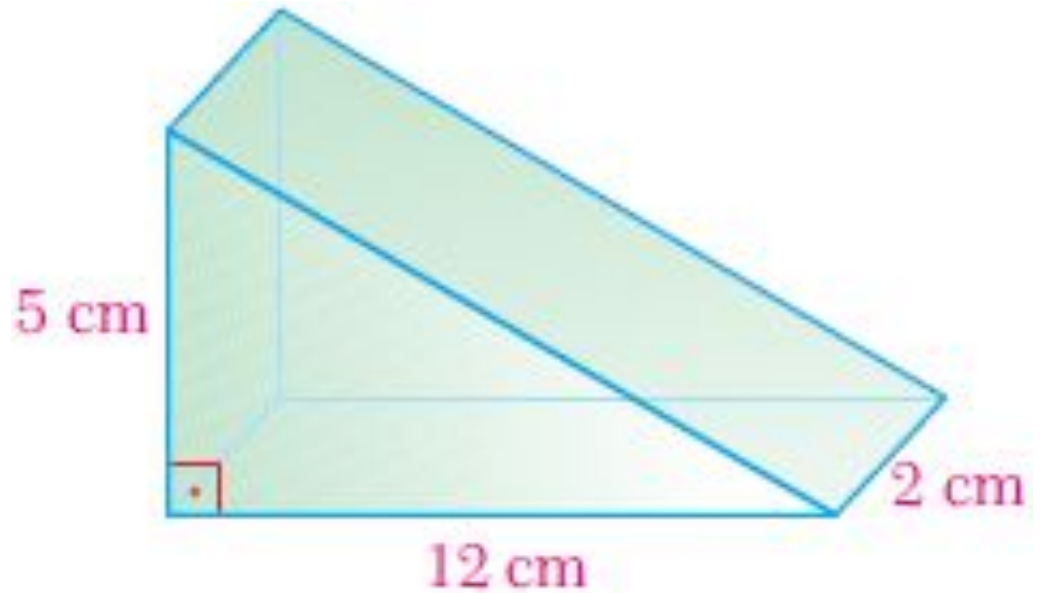


# Example:

What is the lateral area of a regular octagonal prism if all its edges are 5 cm?

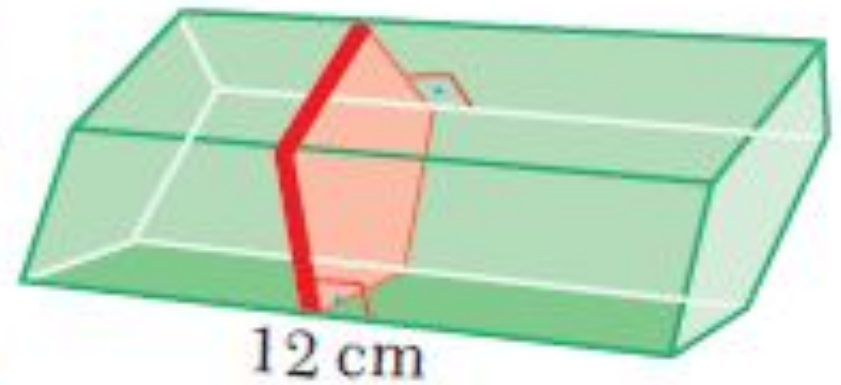
# Example:

What is the total surface area of the right triangular prism in the figure?



# Example:

The oblique prism in the figure has an irregular pentagon base and a regular pentagon right section with side length 3 cm. Find the area of the lateral surface.





# EXAMPLE

The three different faces of a rectangular box have areas  $45 \text{ cm}^2$  ,  $60 \text{ cm}^2$  and  $75 \text{ cm}^2$  . Find the edge lengths of this box.

# EXAMPLE

What is the total surface area of a cube with 7 cm edge length?

# EXAMPLE

The area of a cube is  $1350 \text{ m}^2$  . Find the perimeter of one face.