

- ❖ Do the review exercise given in your textbook to recall your previous knowledge.

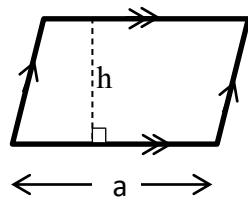
❖ The area of a parallelogram

A quadrilateral with opposite sides parallel to each other is called parallelogram.

Do the activity 01 given in the textbook page number 31.

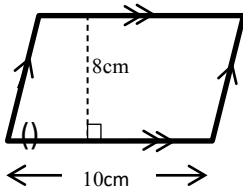
According to the activity,

Area of a parallelogram = Base  $\times$  Perpendicular height



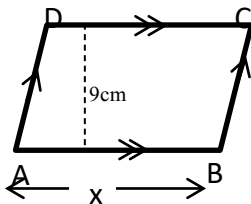
Area of a parallelogram =  $a \times h$

Ex:- (1) Find the area of the following parallelogram.



$$\begin{aligned}\text{Area} &= \text{Base} \times \text{Perpendicular height} \\ &= 10 \times 8 \\ &= 80\text{cm}^2\end{aligned}$$

(2) The area of the following parallelogram is  $72\text{cm}^2$ . Find the length of AB



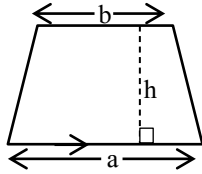
$$\begin{aligned}\text{Area} &= AB \times 9 \\ \frac{72}{9} &= x \times \frac{9}{9} \\ 8\text{cm} &= x \\ AB &= 8\text{cm}\end{aligned}$$

Do the exercise 23.1.

## The area of a trapezium

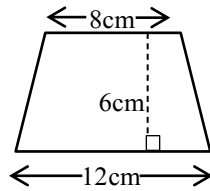
A quadrilateral with one pair of sides parallel is called a trapezium.

❖ Let's take the length of parallel sides as **a, b** and the perpendicular distance between these two sides as **h**.



$$\text{The area of the trapezium} = \frac{1}{2}(a+b) \times h$$

Ex: - Find the area of the following trapezium.



$$\begin{aligned}\text{The area of the trapezium} &= \frac{1}{2}(a+b) \times h \\ &= \frac{1}{2}(12+8) \times 6 \\ &= \frac{1}{2} \times 20 \times 6 \\ &= 60\text{cm}^2\end{aligned}$$

Do the exercise 23.2