

# 11. Area of Rhombus

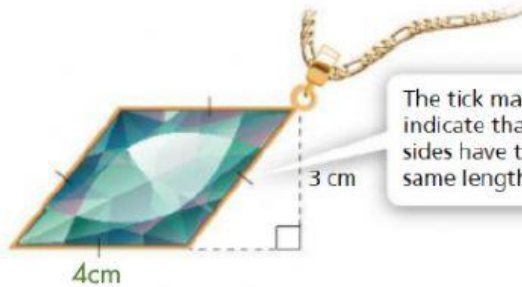
## A. Visual learning

### How can you Find the Area of a Rhombus?

The pendant at the right is the shape of a rhombus with one side of 4cm.

What is the area of the pendant?

A rhombus is a parallelogram with equal sides.



The tick marks indicate that the sides have the same length.

The area of the parallelogram is

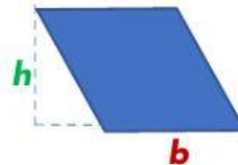
$$A = b \times h$$

$$A = 4 \times 3 = 12\text{cm}^2$$

The area of the pendant is  $12\text{cm}^2$ .

Formula for the area of a rhombus is

$$A = b \times h$$



**b** is the **base** and **h** is the **height** with the same unit of measure.

## B. Vocabulary

parallelogram: \_\_\_\_\_

rhombus: \_\_\_\_\_

formula: \_\_\_\_\_

base: \_\_\_\_\_

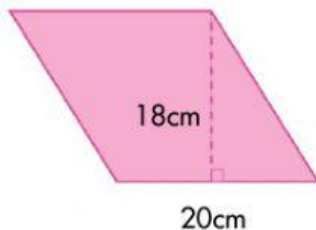
area: \_\_\_\_\_

height: \_\_\_\_\_

### C. Independent practice

In 1 – 3, find the area of each figure.

1.



$$A = \underline{\hspace{2cm}}$$

$$= \underline{\hspace{2cm}}$$

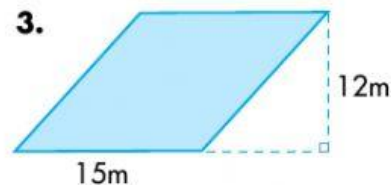
2.



$$A = \underline{\hspace{2cm}}$$

$$= \underline{\hspace{2cm}}$$

3.



$$A = \underline{\hspace{2cm}}$$

$$= \underline{\hspace{2cm}}$$

4. The area of a kite shaped like a rhombus is  $368\text{cm}^2$ .

If the length of the base is 23cm, what is the height?

A. 16cm

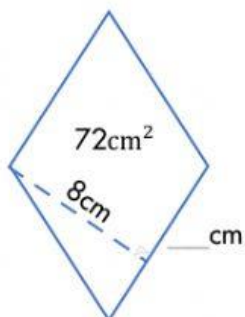
B. 18cm

C. 24cm

D. 28cm

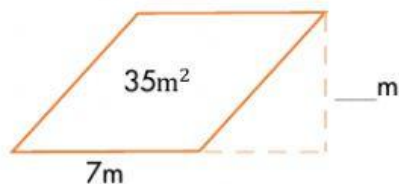
In 5 – 6, find the missing lengths and fill in the blanks.

5.



$$\underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

6.



$$\underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

7. What is the area of the rhombus highlighted in the origami figure below?

Equation:  $\underline{\hspace{2cm}}$

Word answer:  $\underline{\hspace{2cm}}$

$\underline{\hspace{2cm}}$

