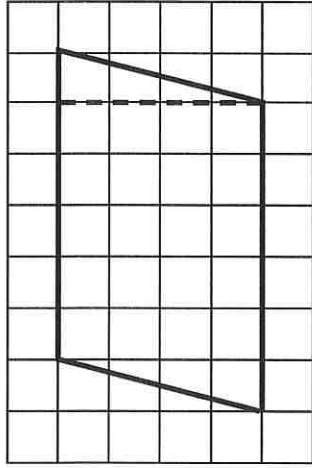


# Area of a parallelogram

- 1 On a piece of squared paper, copy this parallelogram and cut it out.

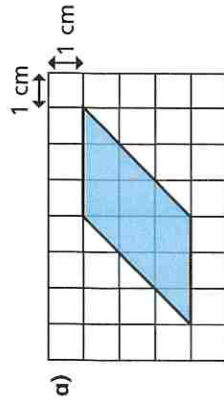


- a) Create a rectangle by cutting off the right-angled triangle and moving it.

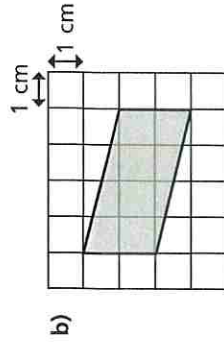
- b) Complete the sentences.  
The area of the rectangle is **24** squares.

The area of the parallelogram is **24** squares.

- 2 Calculate the areas of the parallelograms.

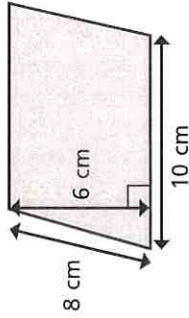


area = **9** cm<sup>2</sup>



area = **8** cm<sup>2</sup>

- 3 Huan is finding the area of the parallelogram.



$$10 \times 8 = 80 \text{ cm}^2$$

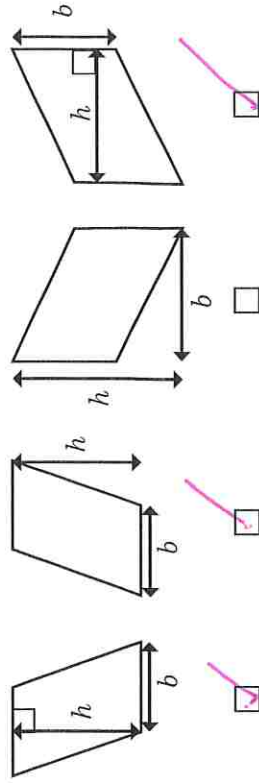
- a) What mistake has Huan made?

*He should have multiplied the base by the perpendicular height.*

- b) What is the correct answer?

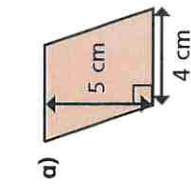
area = **60** cm<sup>2</sup>

- 4 Esther has labelled the bases and heights for four parallelograms. Three are correct; one is incorrect. Tick the shapes that have been correctly labelled.

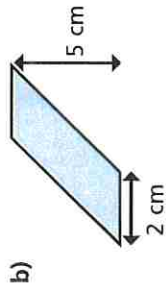


Explain to a partner why one is incorrect.

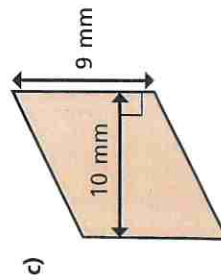
5 Calculate the areas of the parallelograms.



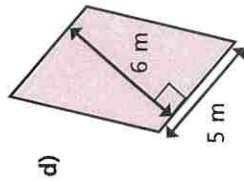
area =   $\text{cm}^2$



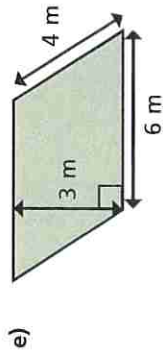
area =   $\text{cm}^2$



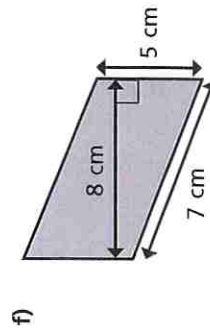
area =   $\text{mm}^2$



area =   $\text{m}^2$

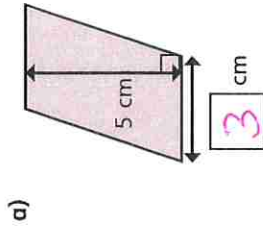


area =   $\text{m}^2$

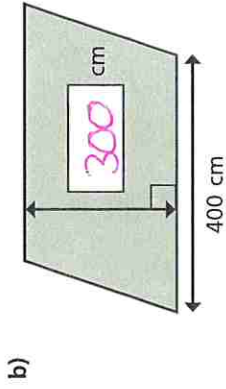


area =   $\text{cm}^2$

6 Find the missing lengths.

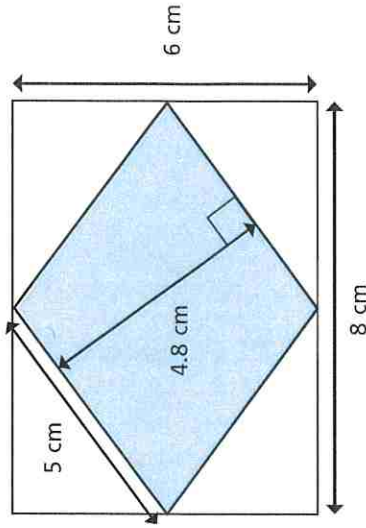


area =  $15 \text{ cm}^2$



area =  $12 \text{ m}^2$

7 Here is a rhombus inside a rectangle.



a) Calculate the area of the rhombus.

$4.8 \times 5$

area =   $\text{cm}^2$

b) 

The area of the rhombus is half the area of the rectangle. This means that it is a special triangle.

A triangle has 3 sides.  
A rhombus is not a triangle, it's a quadrilateral.

Explain to a partner why Mo is wrong.