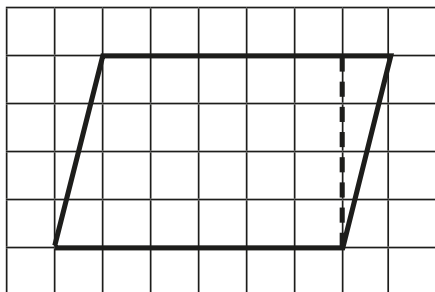


# Area of a parallelogram

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



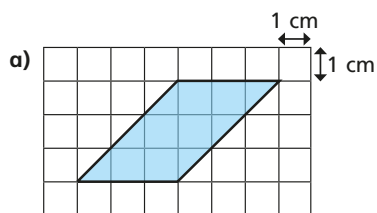
- a) Create a rectangle by cutting off the right-angled triangle and moving it.

- b) Complete the sentences.

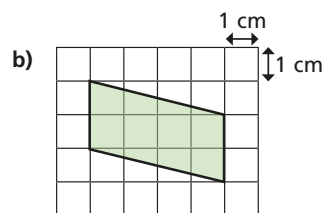
The area of the rectangle is  squares.

The area of the parallelogram is  squares.

- 2 Calculate the areas of the parallelograms.



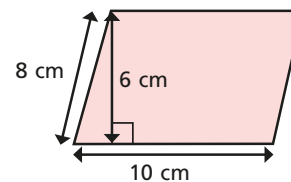
area =  cm<sup>2</sup>



area =  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?

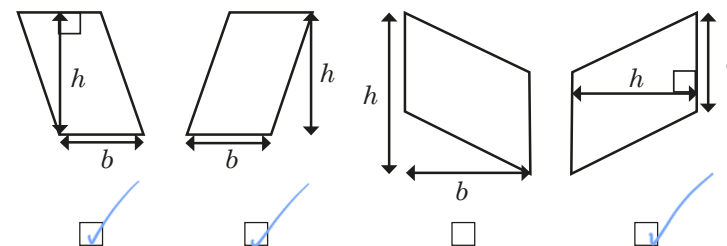
*He hasn't used the perpendicular height.*

- b) What is the correct answer?

area =  cm<sup>2</sup>

- 4 Esther has labelled the bases and heights for four parallelograms.

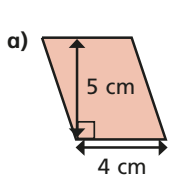
Three are correct; one is incorrect. Tick the shapes that have been correctly labelled.



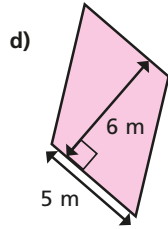
Explain to a partner why one is incorrect.



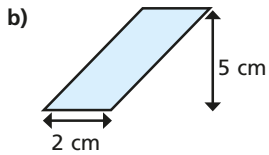
5 Calculate the areas of the parallelograms.



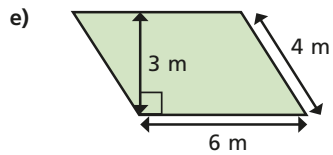
area =  cm<sup>2</sup>



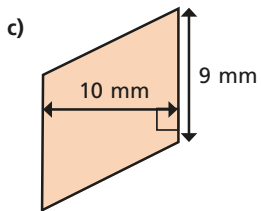
area =  m<sup>2</sup>



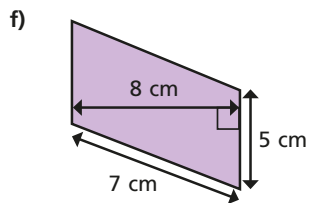
area =  cm<sup>2</sup>



area =  m<sup>2</sup>

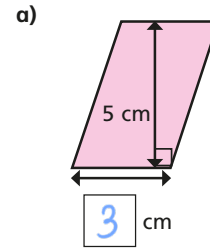


area =  mm<sup>2</sup>

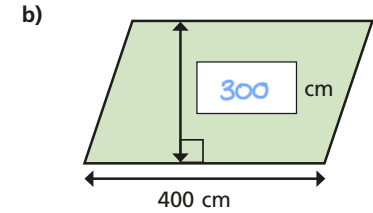


area =  cm<sup>2</sup>

6 Find the missing lengths.

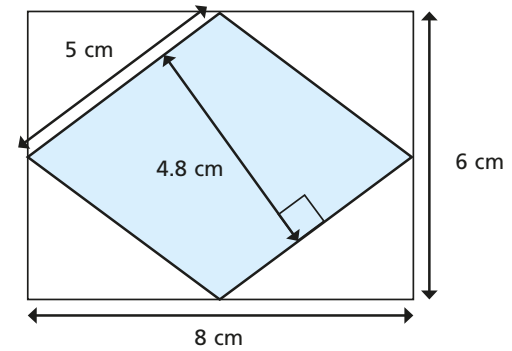


area = 15 cm<sup>2</sup>



area = 12 m<sup>2</sup>

7 Here is a rhombus inside a rectangle.



a) Calculate the area of the rhombus.

area =  cm<sup>2</sup>

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



Explain to a partner why Mo is wrong.

