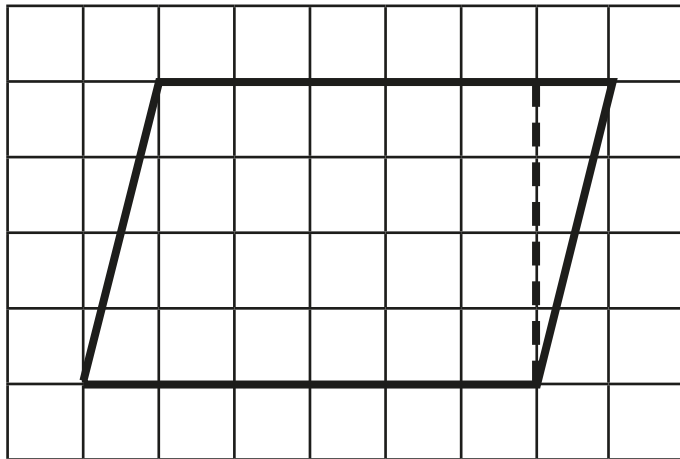# Area of a parallelogram

1 On a piece of squared paper, copy this parallelogram and cut it out.
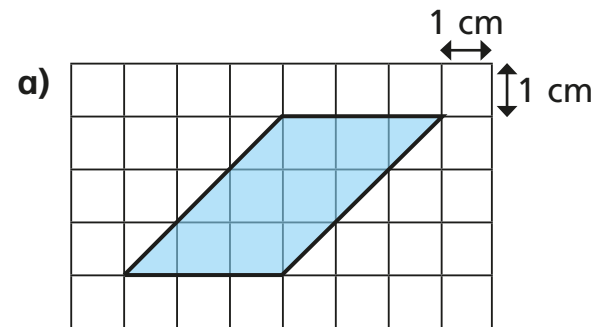
a) Create a rectangle by cutting off the right-angled triangle and moving it.
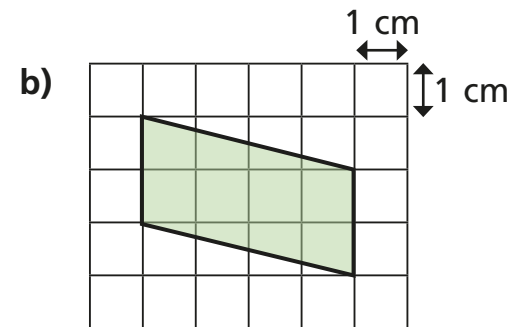
b) Complete the sentences.

The area of the rectangle is [ ] squares.

The area of the parallelogram is [ ] squares.
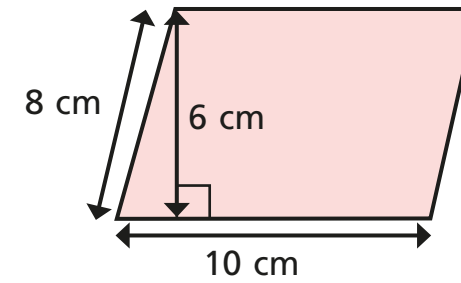
2 Calculate the areas of the parallelograms.

a)

1 cm
1 cm

area = [ ] cm²

b)

1 cm
1 cm

area = [ ] cm²

3 Huan is finding the area of the parallelogram.

8 cm
6 cm
10 cm

$10 \times 8 = 80$ cm²

a) What mistake has Huan made?
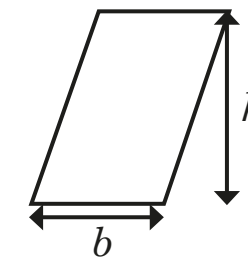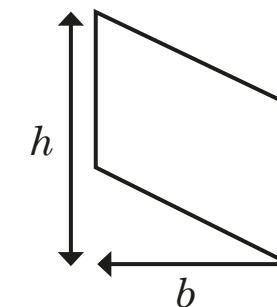
_____

_____
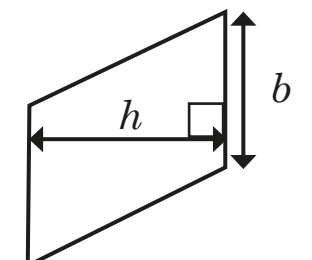
b) What is the correct answer?

area = [ ] cm²

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.
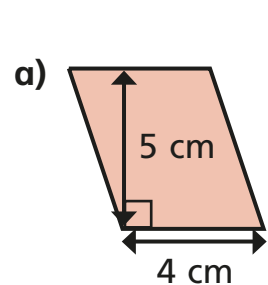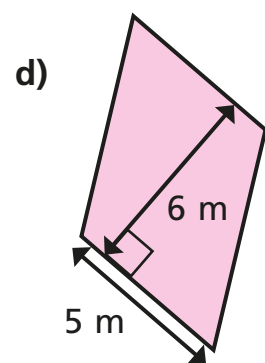
h
b

h
b

h
b

h
b

[ ]   [ ]   [ ]   [ ]
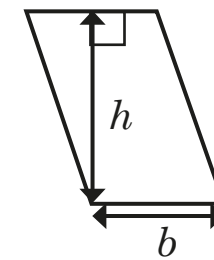
Explain to a partner why one is incorrect.
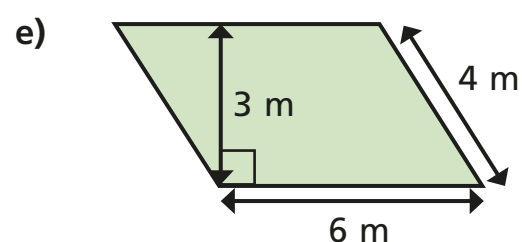
5 Calculate the areas of the parallelograms.

a)

5 cm

4 cm

area = ☐ cm²

d)

6 m

5 m

area = ☐ m²

b)

5 cm

2 cm

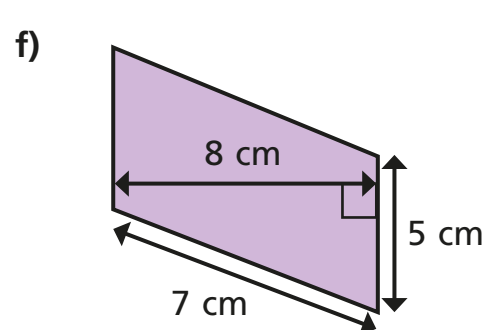area = ☐ cm²

e)

3 m

4 m

6 m

area = ☐ m²

c)

10 mm

9 mm

area = ☐ mm²

f)

8 cm

7 cm

5 cm
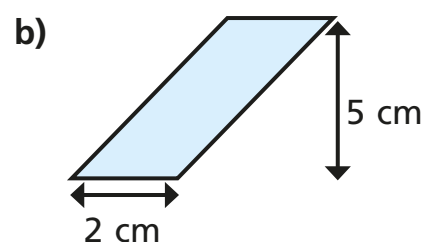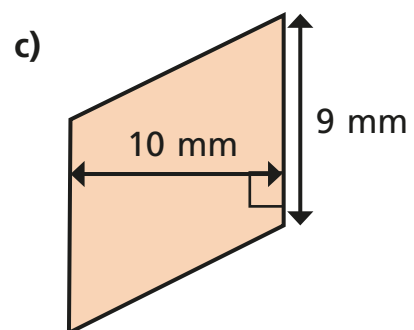
area = ☐ cm²

6 Find the missing lengths.

a)

5 cm

☐ cm

area = 15 cm²

b)

☐ cm

400 cm
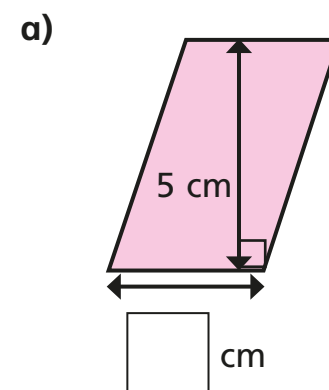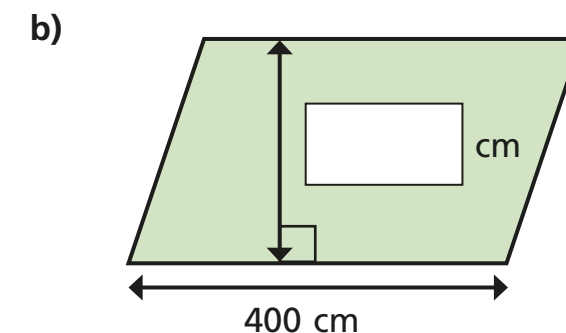
area = 12 m²

7 Here is a rhombus inside a rectangle.

5 cm

4.8 cm

6 cm

8 cm
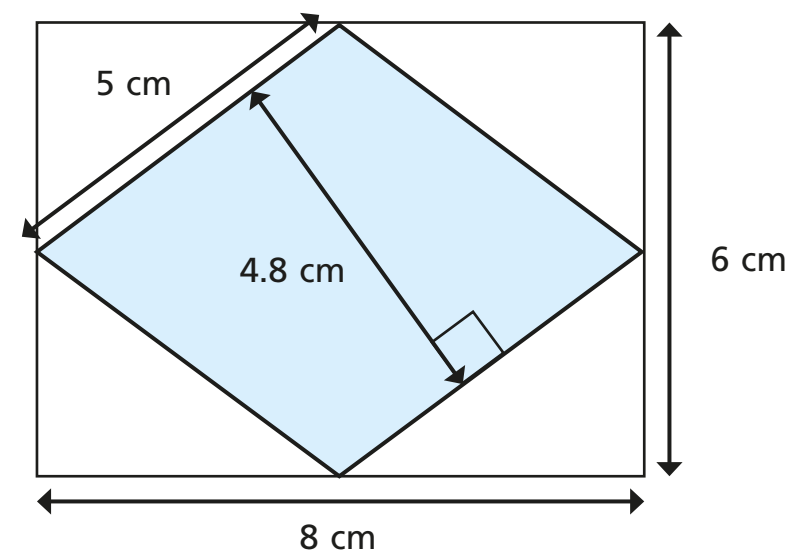
a) Calculate the area of the rhombus.

area = ☐ cm²

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.