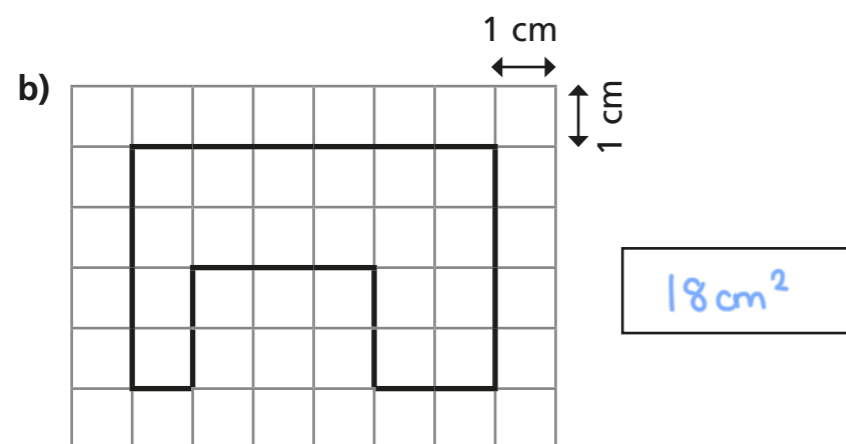# Area of compound shapes

1 On the grid, the area of each square is 1 cm²

Calculate the area of each shape.

a)

1 cm

1 cm

12 cm²

b)

1 cm

1 cm

18 cm²

c)

1 cm

1 cm

12 cm²

2

3 cm   5 cm

B   2 cm

4 cm   A
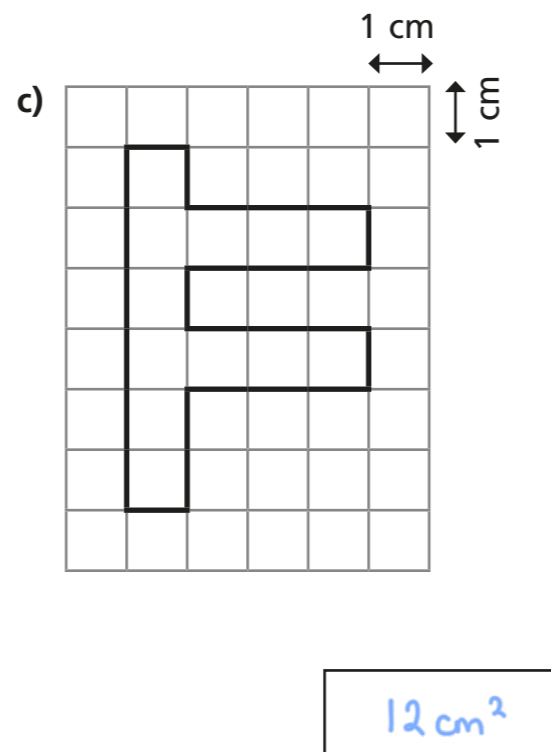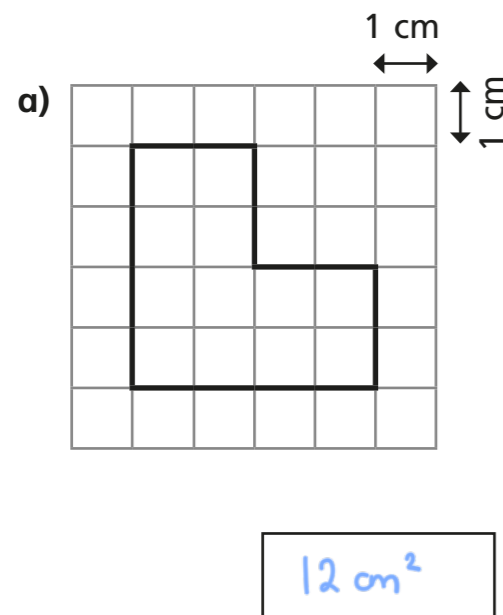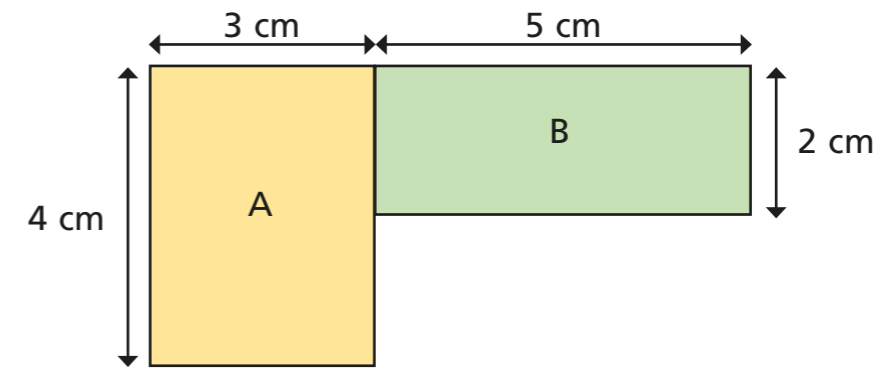
a) Work out the area of rectangle A

area = 12 cm²

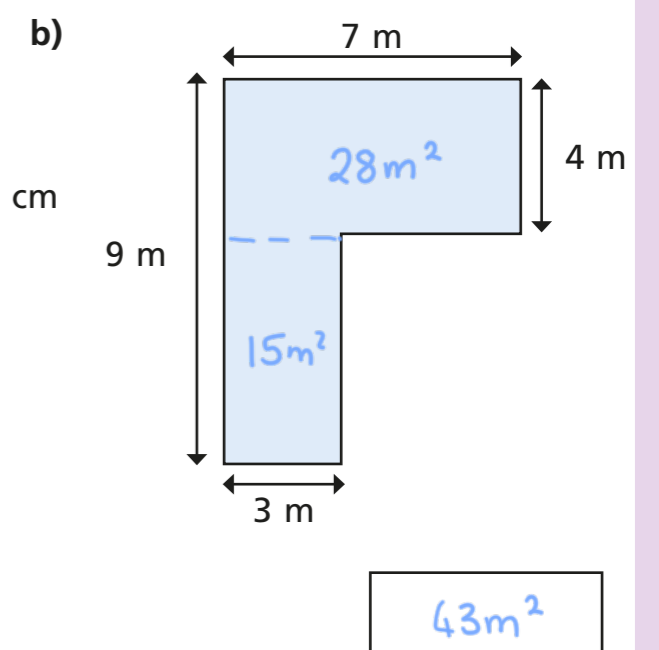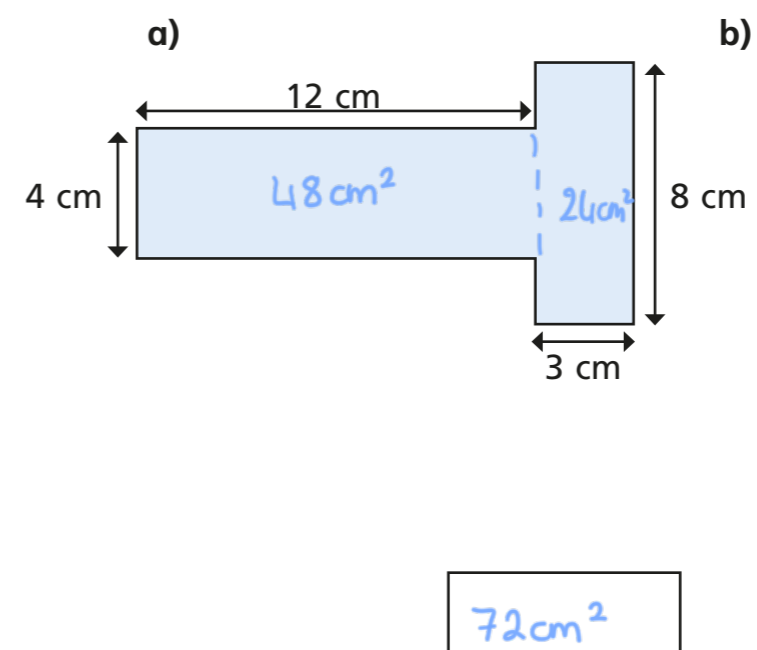**b)** Work out the area of rectangle B

area = 10 cm²

c) Work out the area of the compound shape.
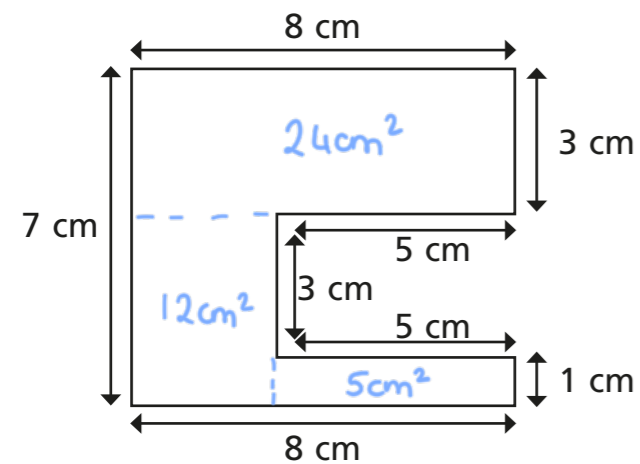
area = 22 cm²

Talk about it with your partner.

3 Work out the area of each of the following shapes.
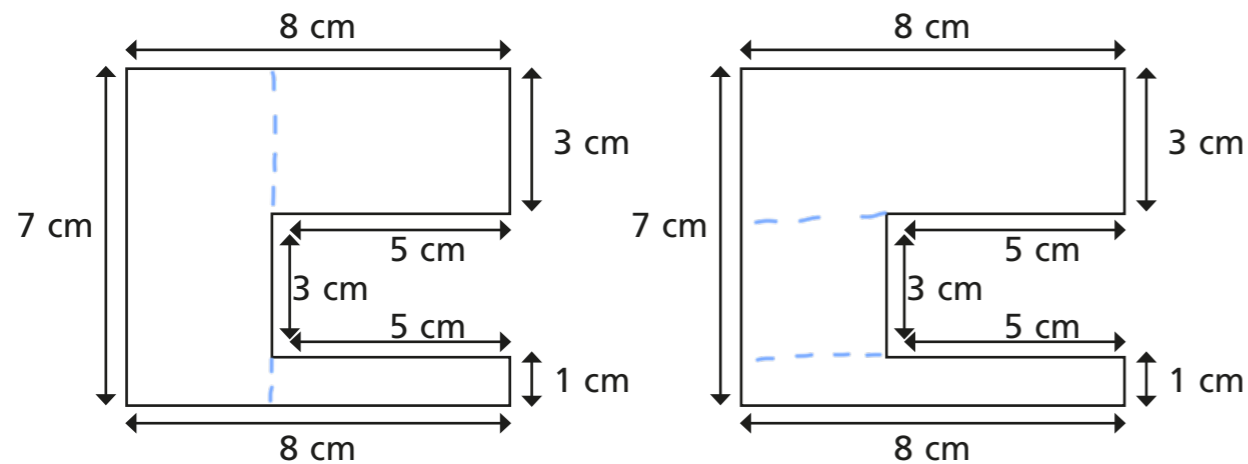
Show all your working.

a)

12 cm

4 cm   48 cm²   24 cm²   8 cm

3 cm

72 cm²

b)

7 m

28 m²   4 m

9 m

15 m²

3 m

43 m²

4 Calculate the area of the compound shapes.

a) Mark on the shape how you partitioned it.

8 cm

24 cm² 3 cm

7 cm 5 cm

12 cm² 3 cm

5 cm

5 cm² 1 cm

8 cm

41 cm²

b) Show how you can partition the shape in two other ways.

8 cm 3 cm

7 cm 5 cm

3 cm

5 cm 1 cm

8 cm

8 cm 3 cm

7 cm 5 cm

3 cm

5 cm 1 cm

8 cm

c) Alex has calculated the area of the same shape below.

8 × 7 = 56
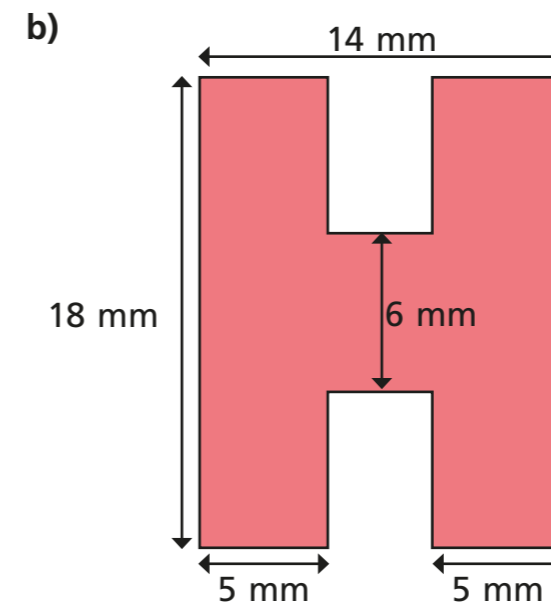
5 × 3 = 15

56 – 15 = 41 cm²

Explain the method Alex has used.

She has found the area of the larger rectangle and subtracted the area of the 'missing' rectangle.

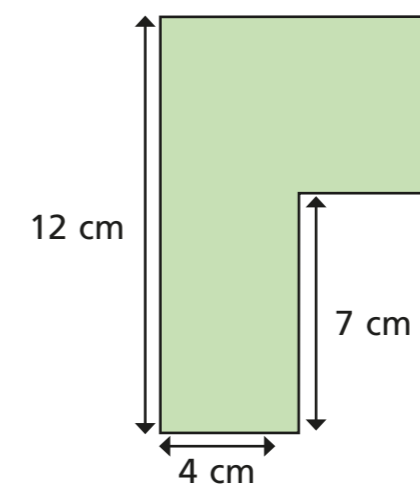**5** Calculate the area of these compound shapes.

a)

7 cm   7 cm

10 cm

4 cm

25 cm

184 cm²

b)

14 mm

18 mm 6 mm

5 mm 5 mm
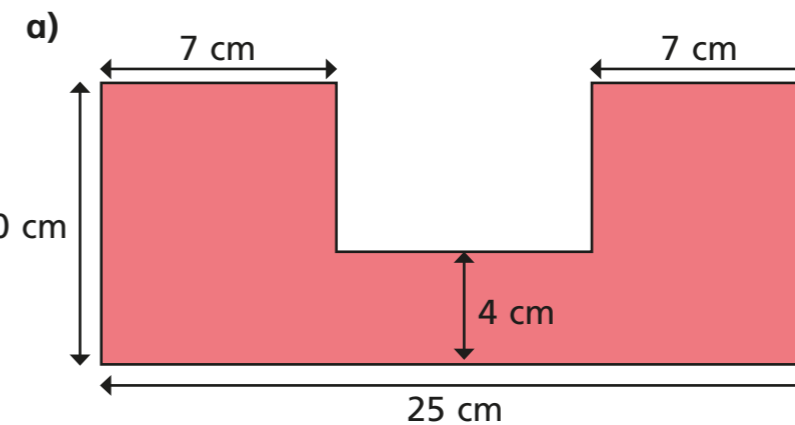
204 mm²

5 The area of this shape is 83 cm²

Work out the perimeter of the shape.

12 cm

7 cm

4 cm

46 cm