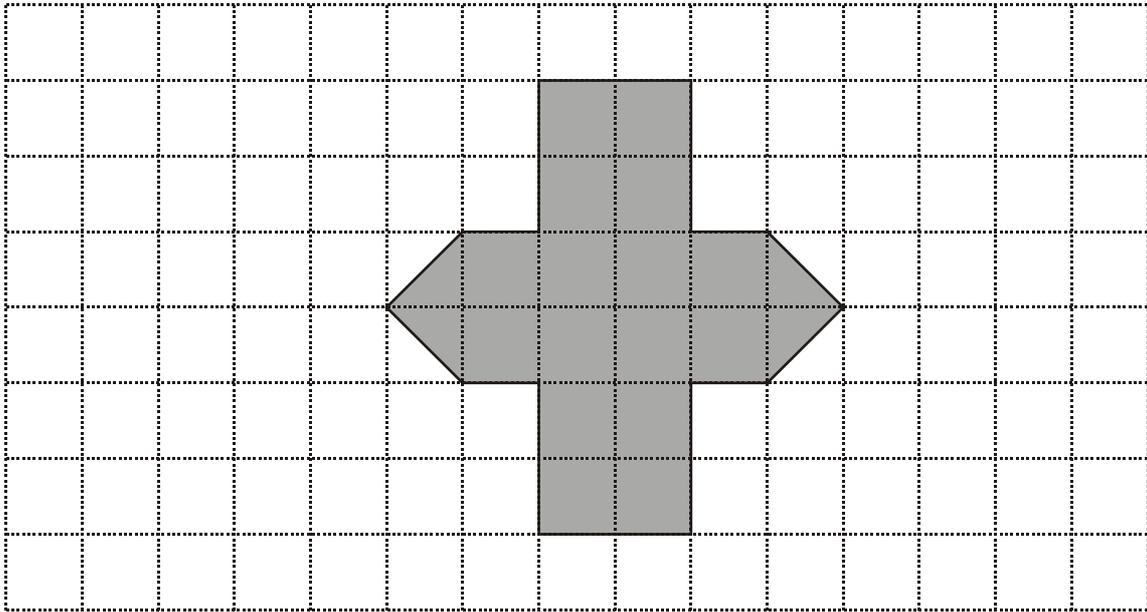1. **Shaded shapes**

Here is a shaded shape on a centimetre square grid.
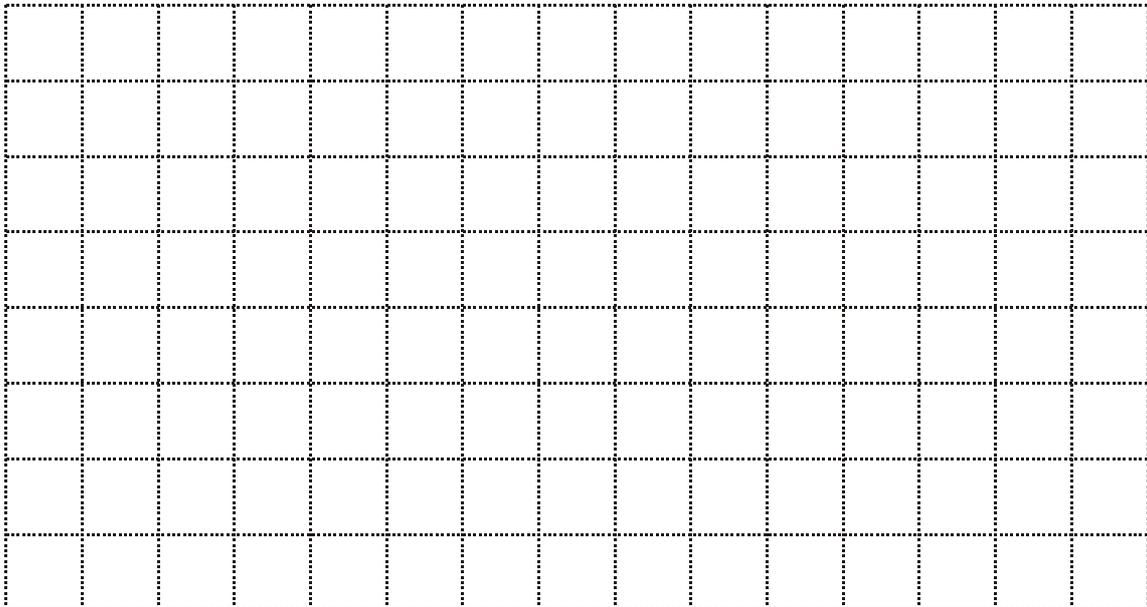

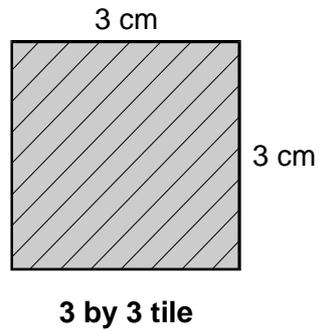(a) What is the area of the shaded shape?

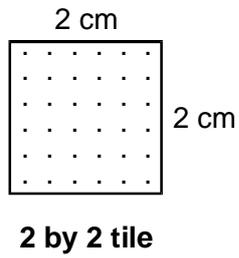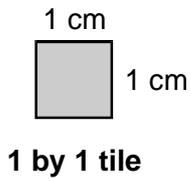✎ .... cm²

1 mark

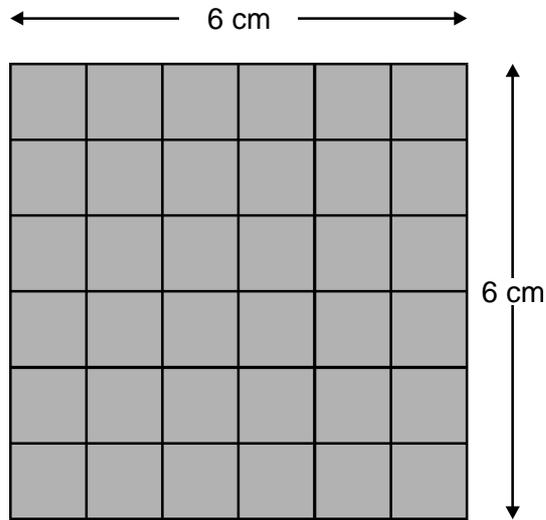(b) Now draw a **rectangle** that has the **same area** as the shaded shape.

1 mark

2. Squares

Alika has a box of square tiles.
The tiles are three different sizes.

1 cm

1 cm

1 by 1 tile

2 cm

2 cm

2 by 2 tile

3 cm

3 cm

3 by 3 tile

She also has a mat that is 6cm by 6cm.
36 of the 1 by 1 tiles will cover the mat.
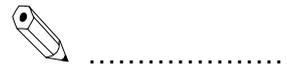
6 cm

6 cm

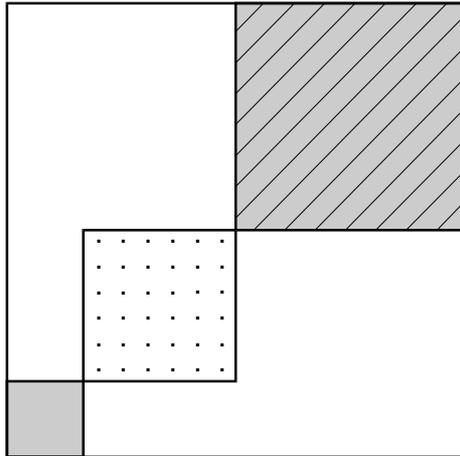(a)   How many of the **2 by 2 tiles** will cover the mat?

✎ …………………

1 mark

(b)   How many of the **3 by 3 tiles** will cover the mat?

✎ …………………

1 mark

(c)   Alika glues three tiles on her mat like this:

Complete the gaps below.

She could cover the rest of the mat by using

another **two** 3 by 3 tiles, and

another . . . . 1 by 1 tiles.

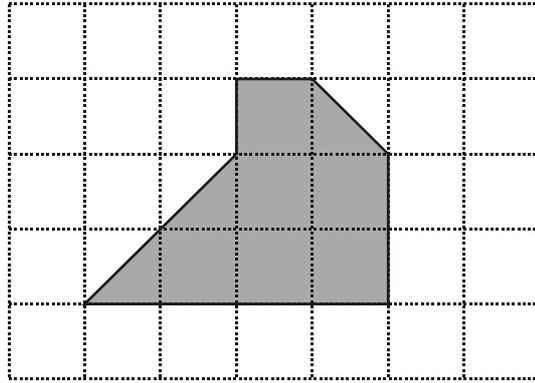1 mark

She could cover the rest of the mat by using

another **two** 2 by 2 tiles, and

another . . . . 1 by 1 tiles.

1 mark

3. Area

Look at the shaded shape on this centimetre square grid.
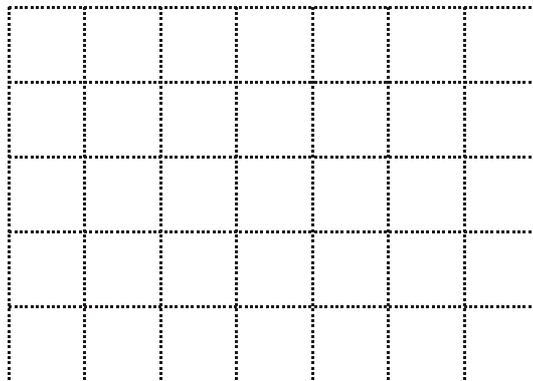

(a) Explain why the shape is a **hexagon**.

✎

1 mark

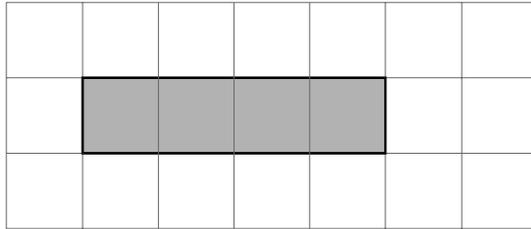(b) What is the **area** of the hexagon?

✎ …………………… cm2

1 mark

(c) On the centimetre square grid below, draw a **triangle** that has an area of **2 cm²**

✎

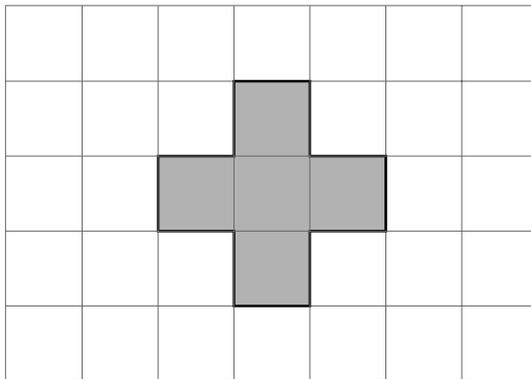
1 mark

4.   Shapes

The shaded rectangle has an **area** of **4 cm²** and a **perimeter** of 1**0 cm**.
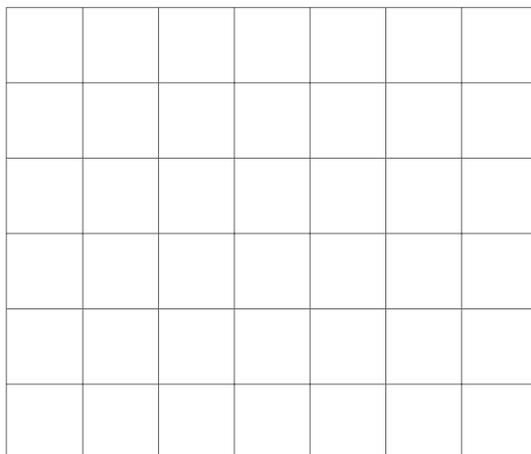
(a)   Look at the cross-shape.

Fill in the gaps below. The cross-shape has

an **area** of …………… **cm²** and a **perimeter** of ………… **cm.**

2 marks
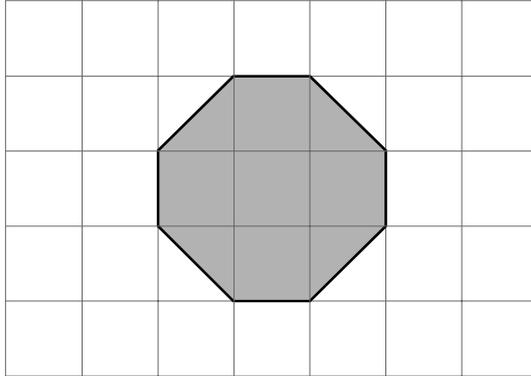
(b)   Draw a shape with an **area** of **6 cm²**

1 mark

(c)   What is the **perimeter** of your shape?

.... cm

1 mark

(d)   Look at the octagon.

What is the area of the octagon?

.... cm2

1 mark

(e)   Explain how you know that the perimeter of the octagon is **more than 8cm**.

1 mark

Total 6 marks