1) **a)** Use the labelled sides to find the length of the unlabelled side on each of these shapes.
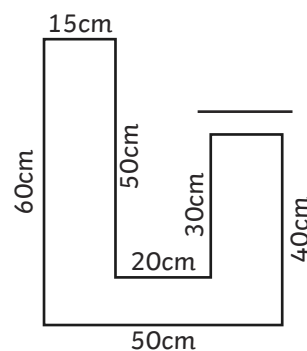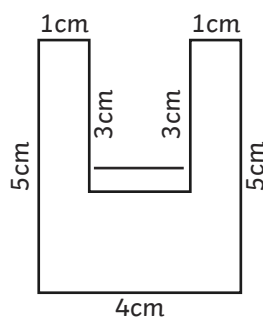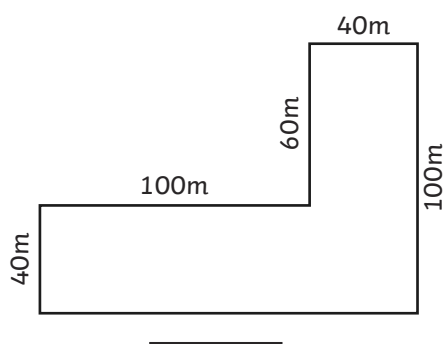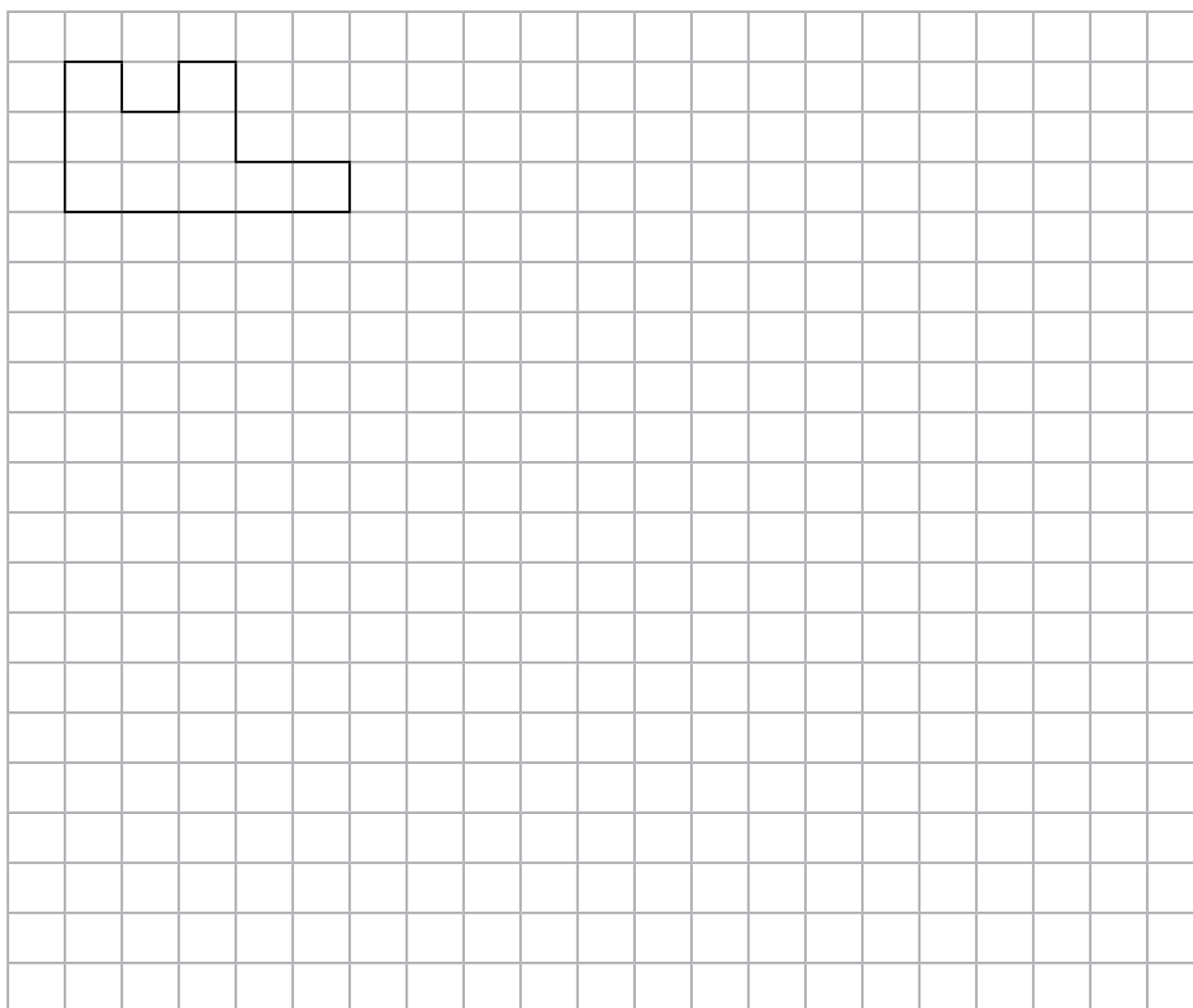
    b) Calculate the perimeter of each shape.

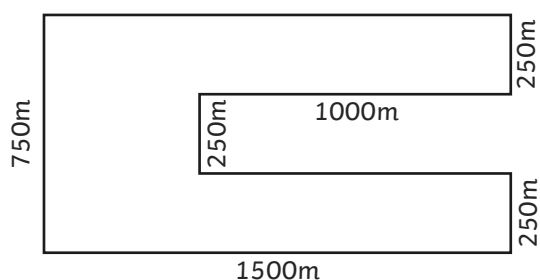Shape 1: 40m, 60m, 100m, 100m, 40m (unlabelled side at bottom)

Shape 2: 1cm, 1cm, 3cm, 3cm, 5cm, 5cm, 4cm

Shape 3: 15cm, 50cm, 60cm, 30cm, 20cm, 40cm, 50cm

Perimeter = _____

Perimeter = _____

Perimeter = _____

2) Each square has an area of 1cm².

    a) What is the perimeter of the shape? _____

    b) Draw two other rectilinear shapes with the same perimeter.

1) Toby says, "This shape has a perimeter of 4000m."

750m   250m   250m   1000m   250m   1500m

a) Explain his mistake:

_____

_____

b) Calculate the correct perimeter:

Perimeter: _____

2) Are these statements true or false? Explain how you know.

a) A rectangle with sides 2cm and 8cm, will have the same perimeter as a square with 5cm sides.

_____

_____

b) A long, thin rectangle will always have a longer perimeter than a shorter, wider rectangle.
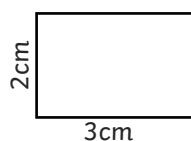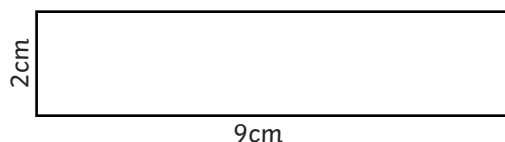
_____

_____

c) If you put a square with sides of 4cm and a square with sides of 6cm side by side on a straight line, they make a rectilinear shape with a perimeter of 40cm.

_____

_____

1) a) Use these shapes to create a compound rectilinear shape.

5cm
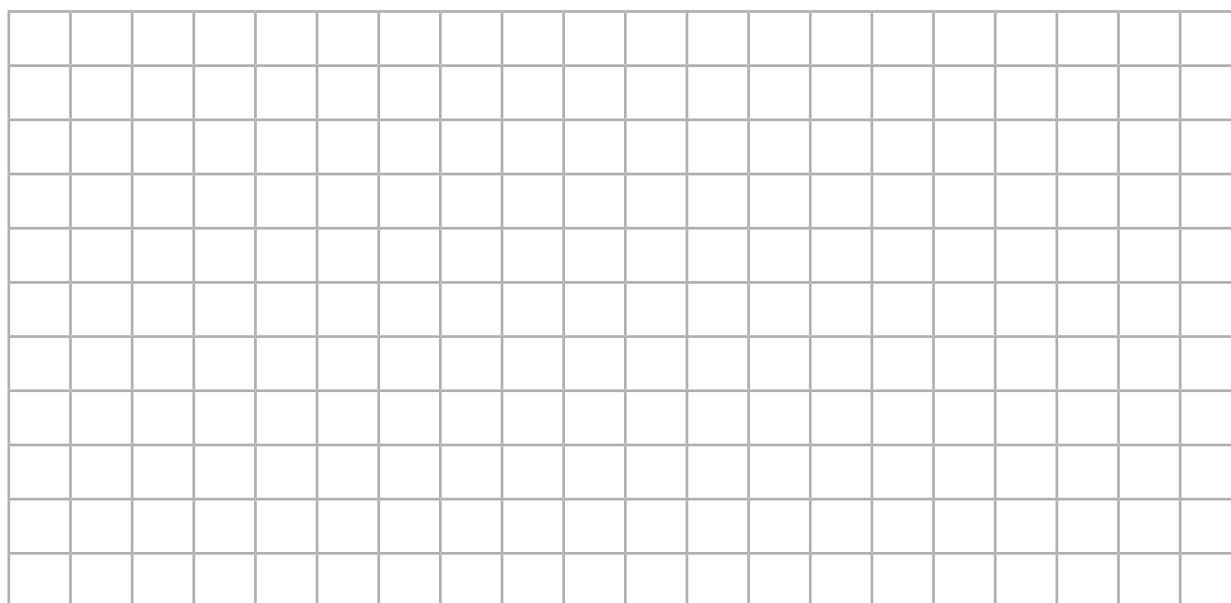4cm

2cm
9cm

2cm
3cm

(Shapes are not drawn to scale.)
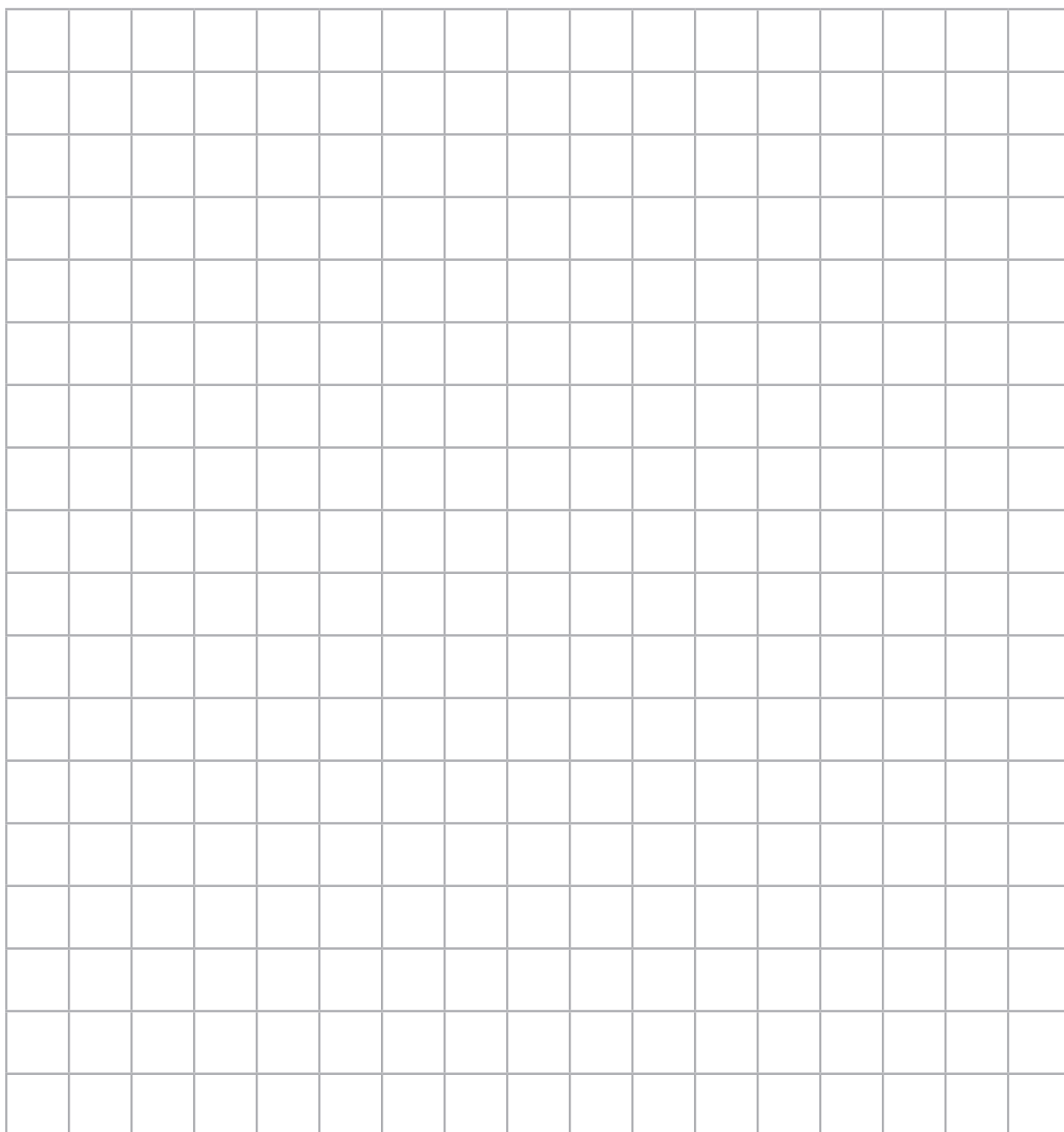
What is the perimeter of your new shape? _____

b) Amma says, "I can rearrange the rectangles to make a new shape with a different perimeter."

Is she correct? _____

Prove It!

2) a) How many different rectilinear shapes, which are not rectangles or squares, can you make that have a perimeter of 42cm?

b) Tarj thinks that adding one more square to all of the shapes he has drawn on centimetre squared paper with perimeters of 42cm will change them into shapes with perimeters of 45cm. Is he right? How do you know?

_____

_____

_____

_____