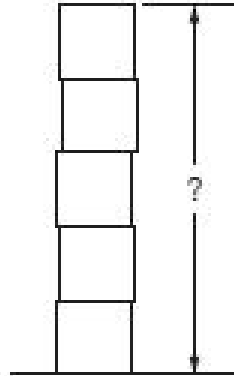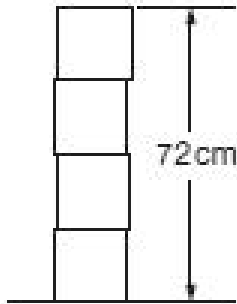# L6 Booster Shape

Name:_____

Date: _____

13. Lisa has some boxes that are all cubes of the same size.

She uses four of the boxes to make a pile with a height of **72cm**.

She puts one more box on top of the pile.

Work out the height of the pile of **five** boxes.

_____ cm

23. The diagram shows a square with a **perimeter** of **12cm**.

Not drawn
accurately

Six of these squares fit together to make a rectangle.

Not drawn
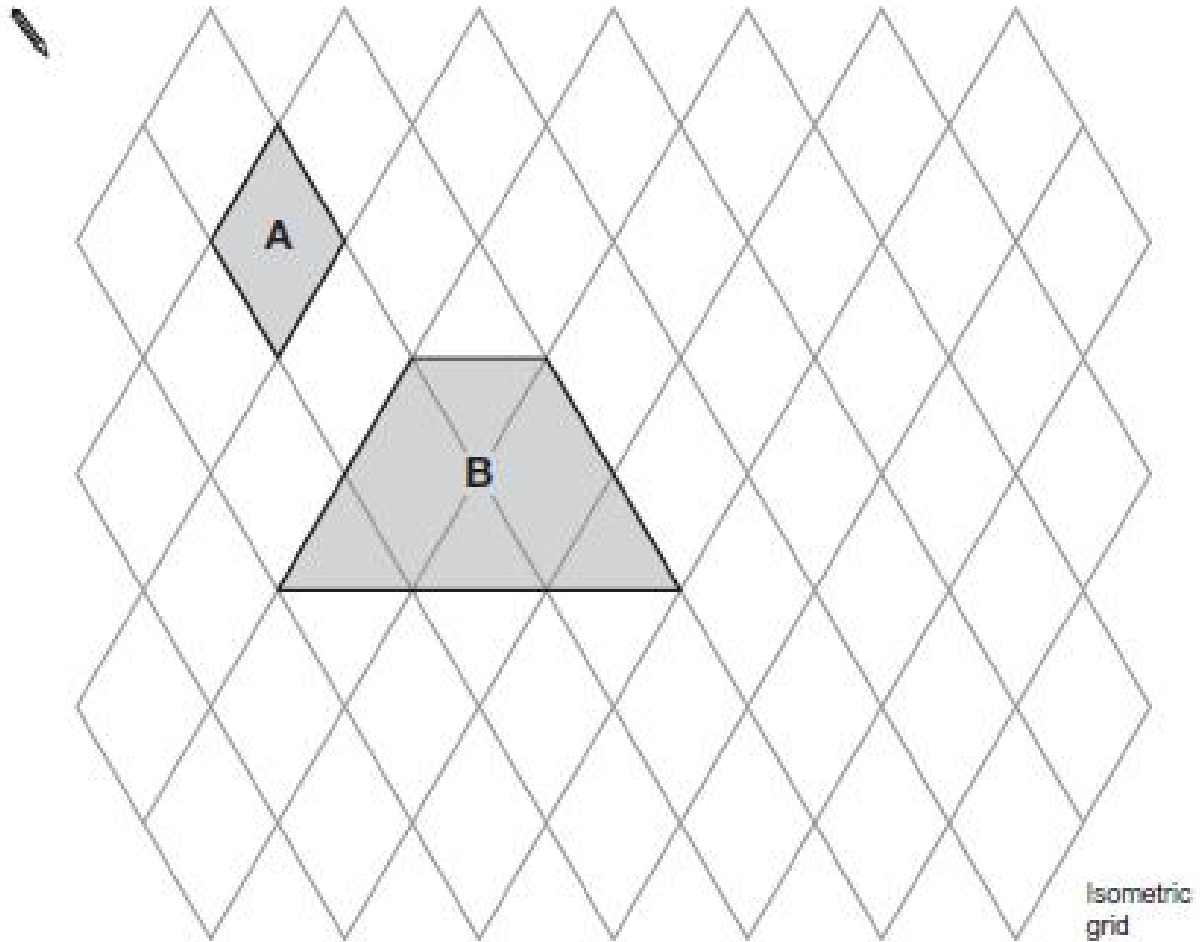accurately

What is the **area** of the **rectangle**?

You **must** give the correct unit with your answer.

1 mark
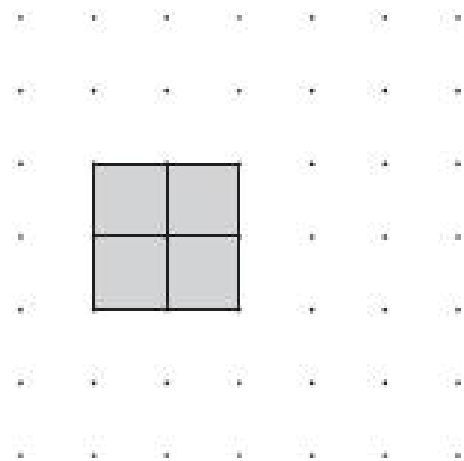
1 mark

5. Look at the shaded shapes.

Isometric
grid

(a) The area of shape **A** is **3cm^2**
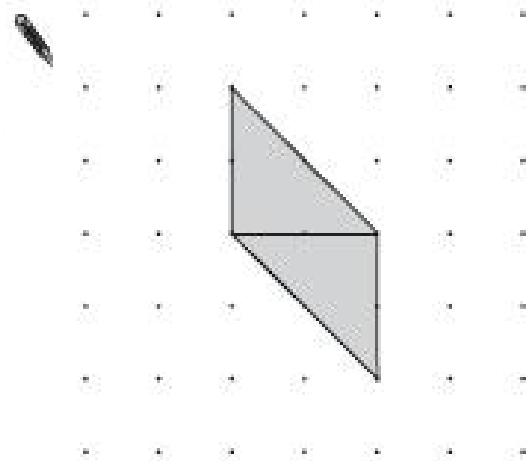
What is the area of shape **B**?

_____ cm^2

(b) On the grid, draw a **triangle** that has an area of **6cm^2**

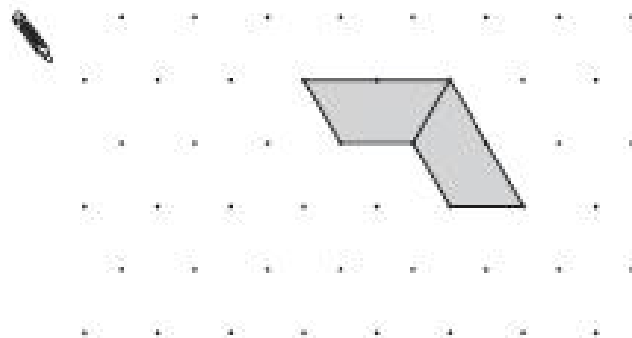**10.** **Four** squares join
together to make a bigger square.

(a) **Four** congruent triangles join
together to make a bigger triangle.

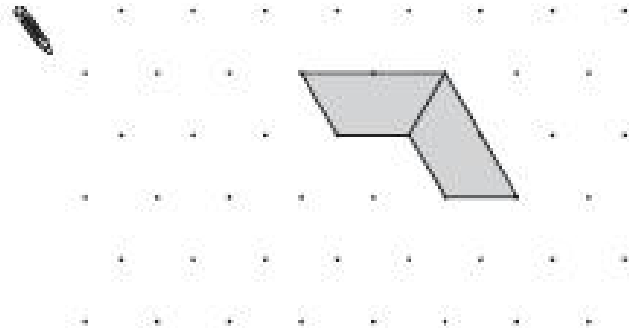Draw **two more** triangles to complete
the drawing of the bigger triangle.

(b) Four congruent trapeziums join to make a bigger trapezium.

Draw **two more** trapeziums to complete the drawing of the
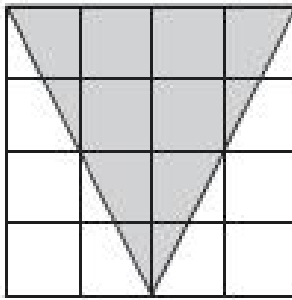bigger trapezium.

(c) Four congruent trapeziums join together to make a **parallelogram**.

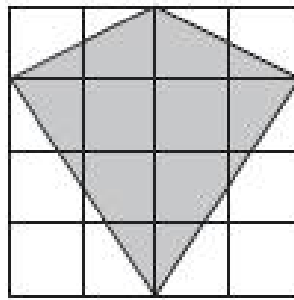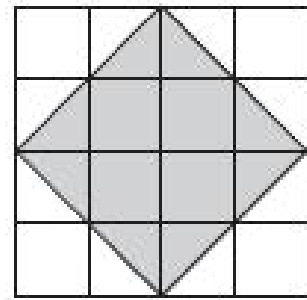Draw **two more** trapeziums to complete the drawing of the parallelogram.

17. The shapes below are drawn on square grids.

shape **A**   shape **B**   shape **C**

(a) Is shape **A** an **equilateral triangle**? Tick (✓) Yes or No.

☐ Yes   ☐ No

Explain your answer.

(b) Is shape **B** a **kite**?

☐ Yes   ☐ No

Explain your answer.

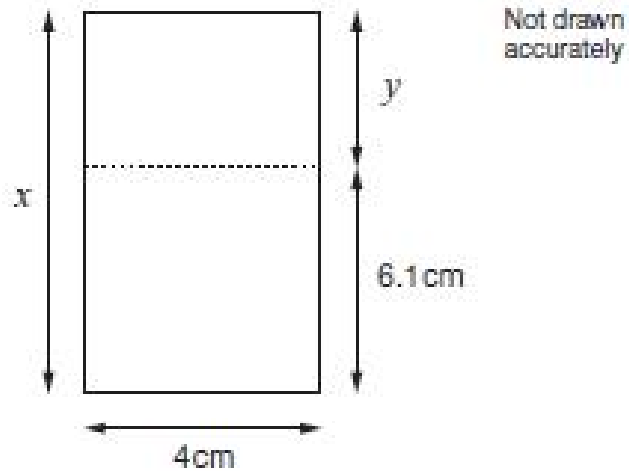(c) Is shape **C** a **square**?

☐ Yes   ☐ No

Explain your answer.

20. Look at the rectangle.

Not drawn accurately

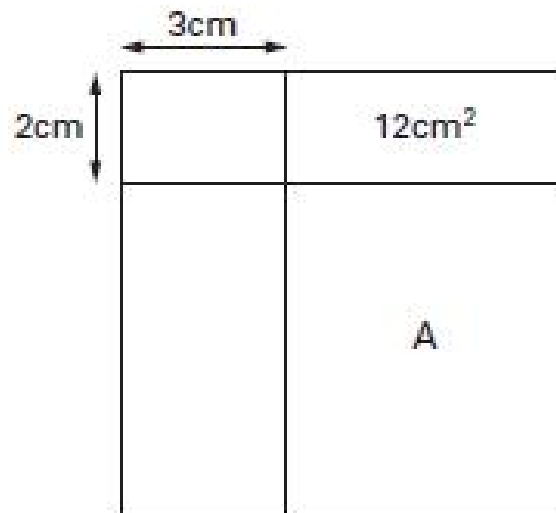The **total area** of the rectangle is **40 cm²**

Work out lengths x and y

$x =$ _____ cm $y =$ _____ cm

17. The diagram shows a **square**.

Two straight lines cut the square into four rectangles.
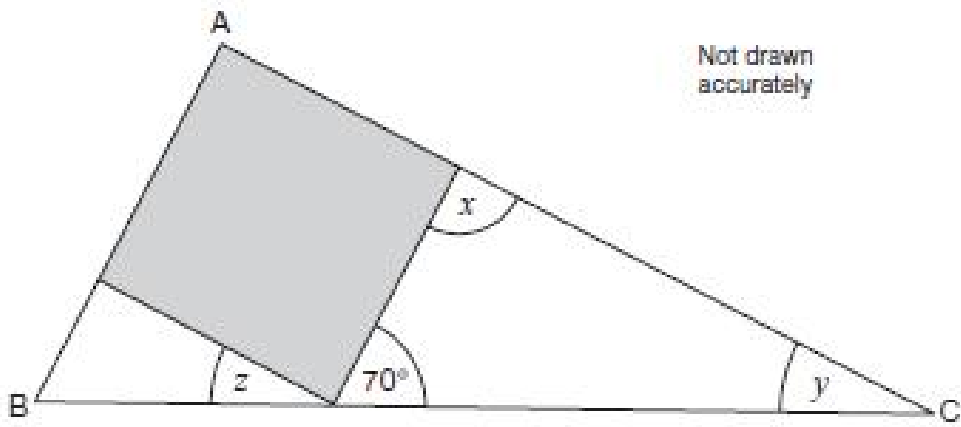
The area of one of the rectangles is shown.

3cm

2cm | 12cm²

A

Not drawn
accurately

Work out the area of the rectangle marked A.

.... cm²

2 marks

16. Look at the right-angled triangle ABC.

Not drawn accurately

The square fits exactly inside the triangle.

Work out the sizes of angles x, y and z

$x =$ _____ °

$y =$ _____ °

$z =$ _____ °

3 marks

17. The diagram shows two isosceles triangles inside a parallelogram.

Not drawn accurately
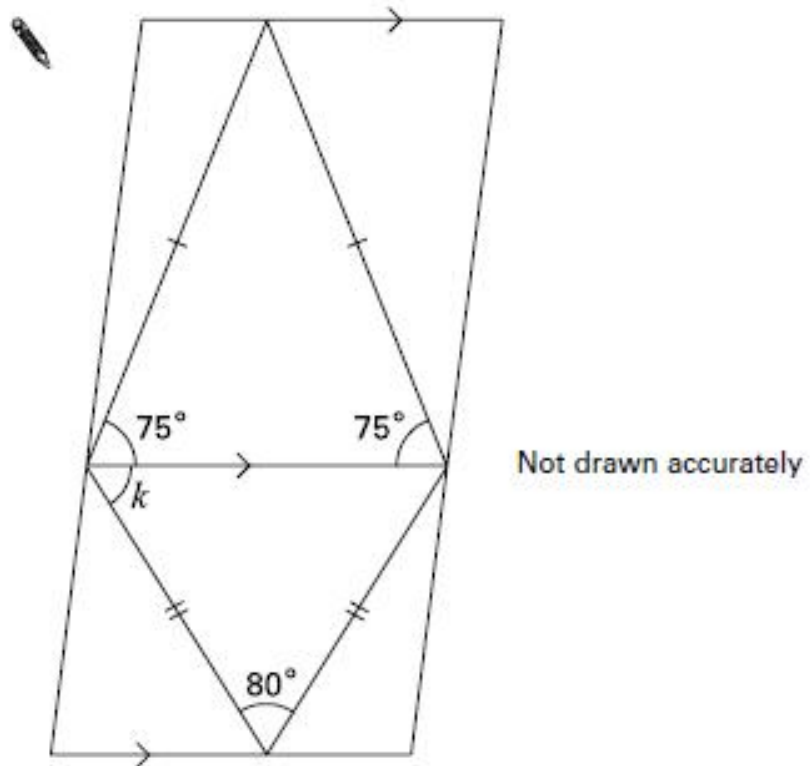
(a) On the diagram, mark another angle that is $75°$
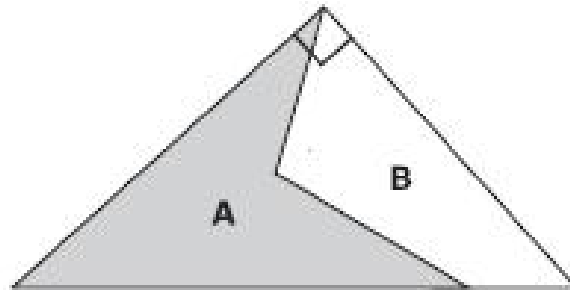
Label it $75°$
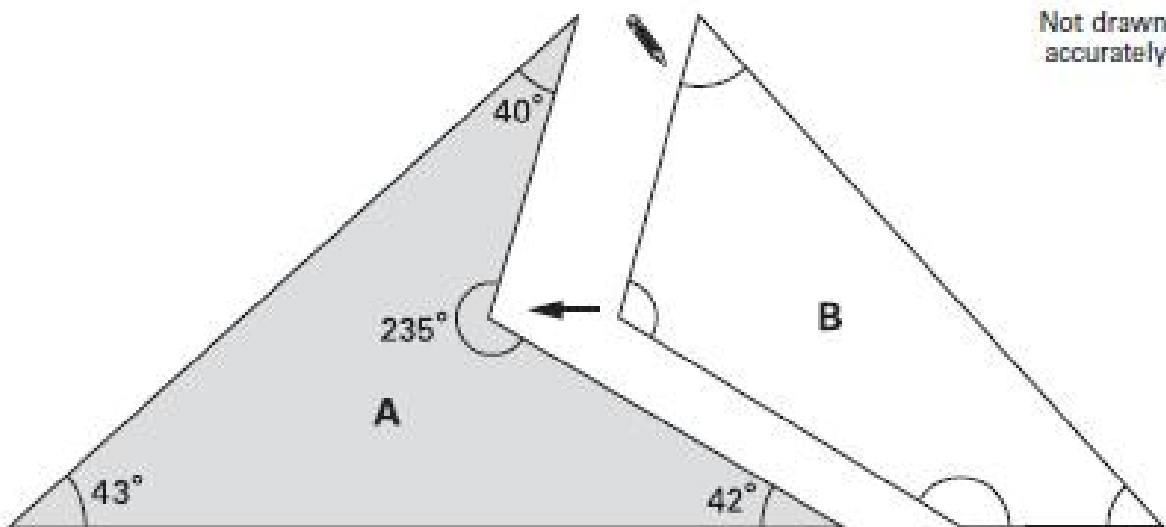
(b) Calculate the size of the angle marked k

Show your working.

17. The drawing shows how shapes A and B fit together to make a **right-angled** triangle.
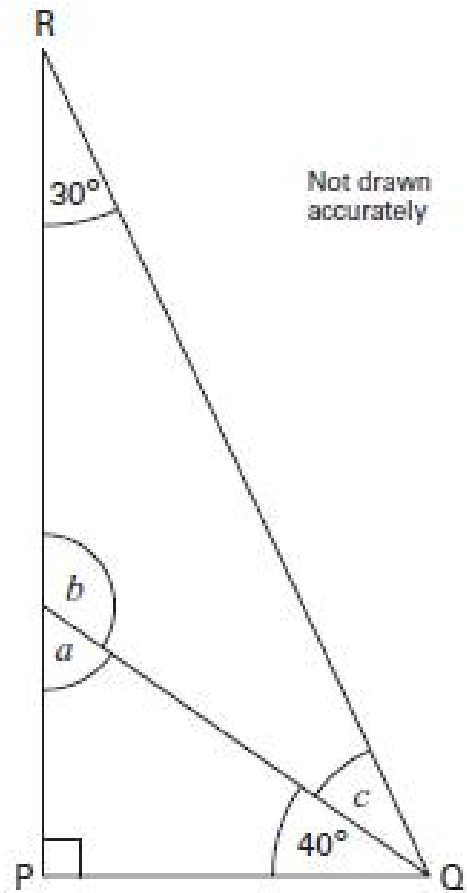

Work out the size of each of the angles in shape B.

Write them in the correct place in shape B below.

Not drawn accurately

40°

235°

A

43°

42°

B

. . . . .

. . . . .

. . . . .

3 marks

13. The diagram shows triangle PQR.

R

30°

Not drawn
accurately

b

a

c

40°

P

Q

Work out the sizes of angles *a*, *b* and *c*

a = ...°   *b* = ...°   *c* = ...°

22. This shape has been made from two congruent **isosceles** triangles.
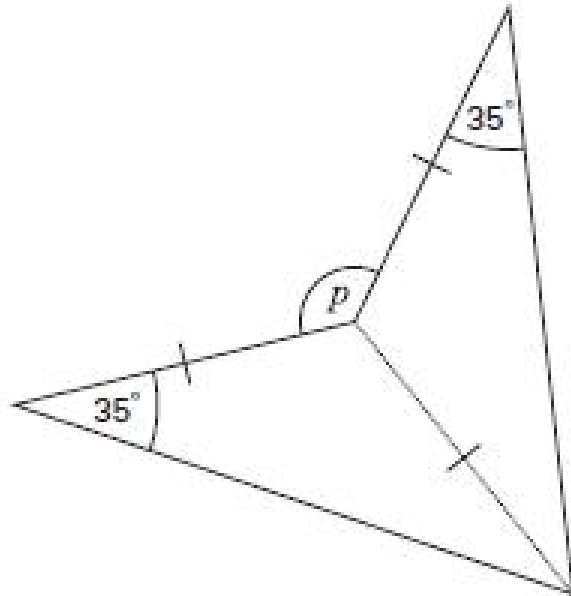
Not drawn
accurately

What is the size of angle *p*?

$p = $ ....°

. . . . .

. . . . .

2 marks

20.   The diagram shows three straight lines.

60°

Not drawn
accurately

c

a   130°

b

Work out the sizes of angles *a*, *b* and *c*

Give reasons for your answers.

a = _____° because _____

_____

_____

1 mark

b = _____° because _____

_____

_____

1 mark

c = _____° because _____

_____

_____

1 mark