Mr Sayer's Maths Group

Monday 27th April

LO: Counting Squares

Starter:

1) ½ of 48 =

2) ½ of 36 =

3) ½ of 54 =

Area – Remember

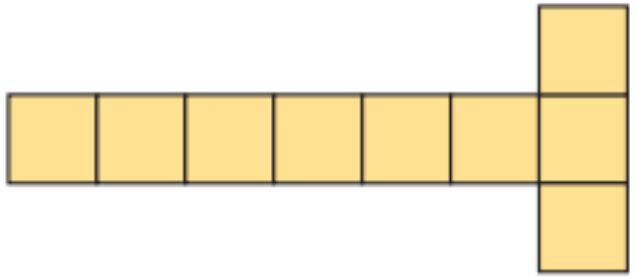
Area is the amount of space occupied by a flat **shape** or the surface of an object.

Looking at the rectangle, the area of it is the entire space inside the edges.

Question A

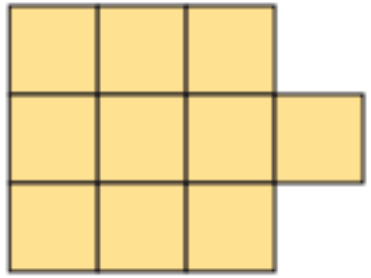
Count the squares in each shape to find the area.

A



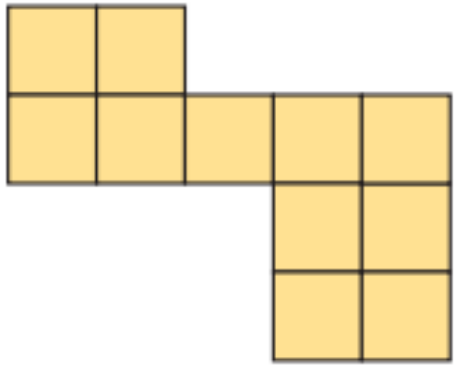
The area is ☐ squares.

B



The area is ☐ squares.

C



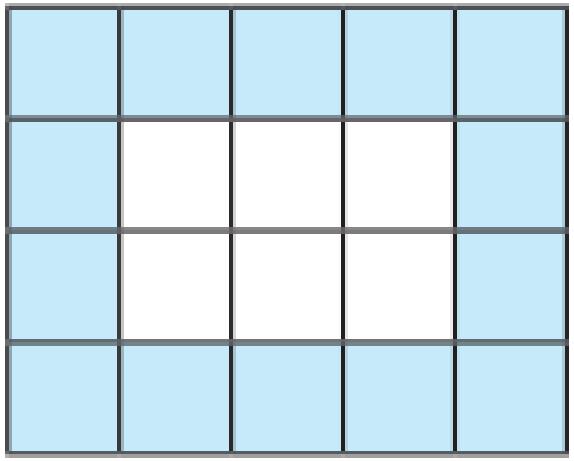
The area is ☐ squares.

Which shape has the greatest area? _____

You can check your answers at the end

Question B

What is the area of the shaded part of the shape?

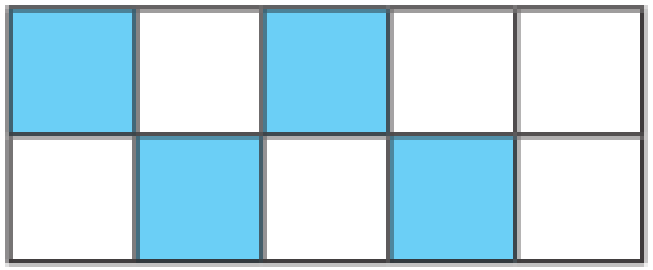


The area is ☐ squares.

You can check your answers at the end

Question C

Here is a kitchen tile.



a) What area of the tile is blue? ☐ squares

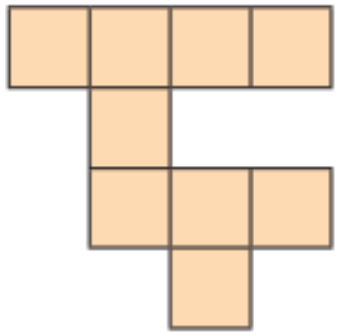
b) What area of the tile is white? ☐ squares

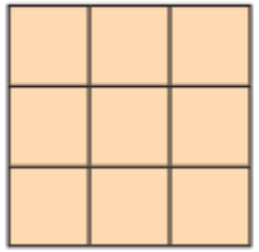
c) What is the total area of the tile? ☐ squares

You can check your answers at the end

Question D

These two shapes are made up of squares of the same size.





Jack

These two shapes have the same area.

Rosie

The first shape is bigger as it takes up more space.

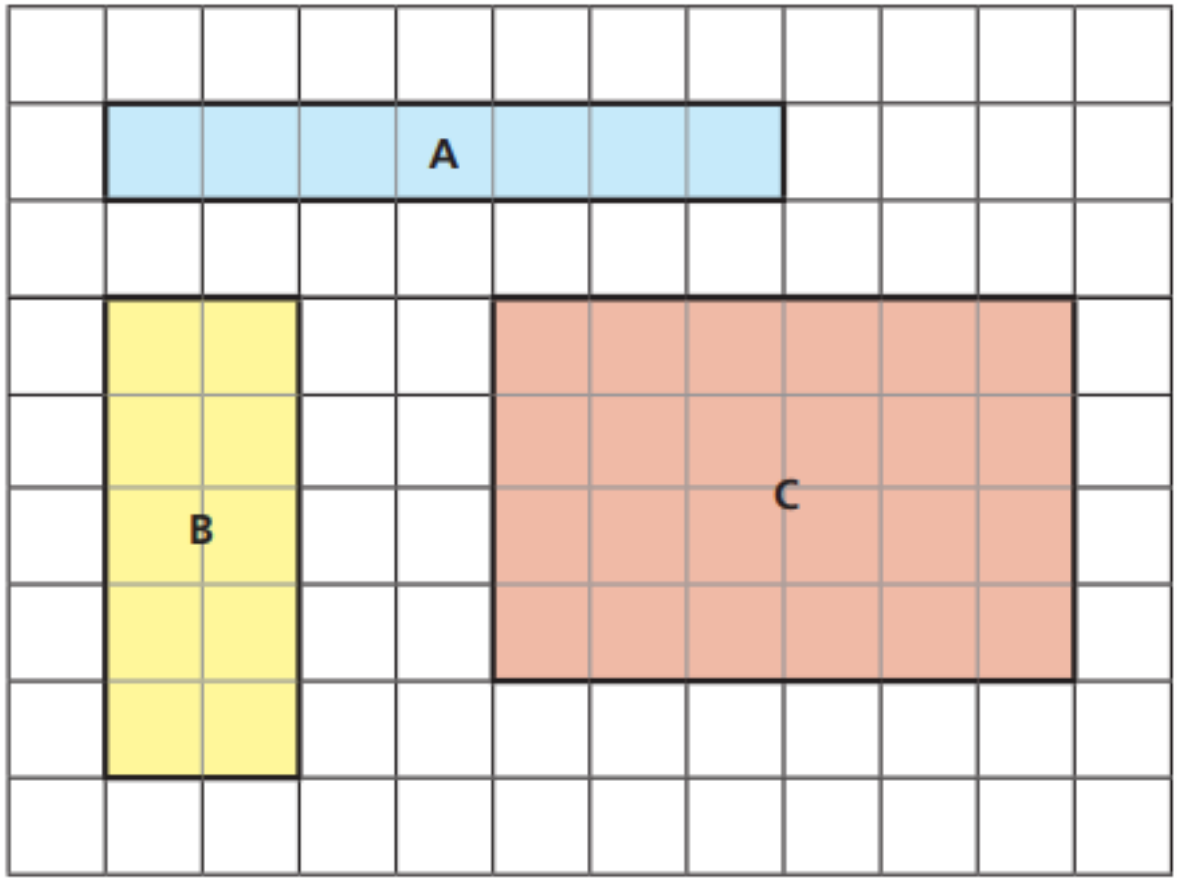
Who is correct? _____

Explain how you know.

You can check your answers at the end

Question E

Find the area of each rectangle.

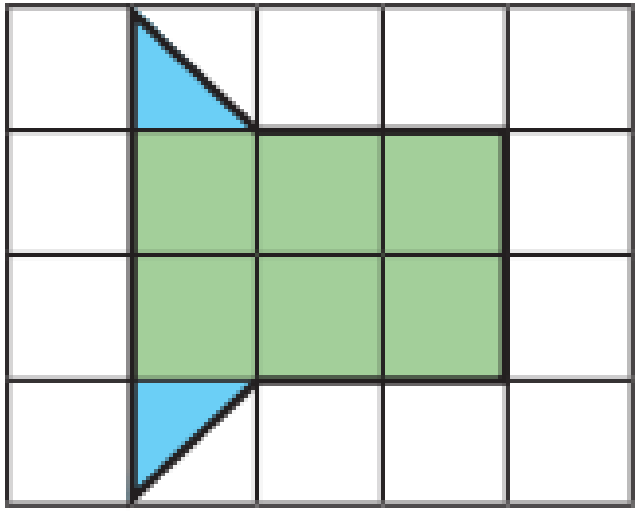


A = ☐ squares B = ☐ squares C = ☐ squares

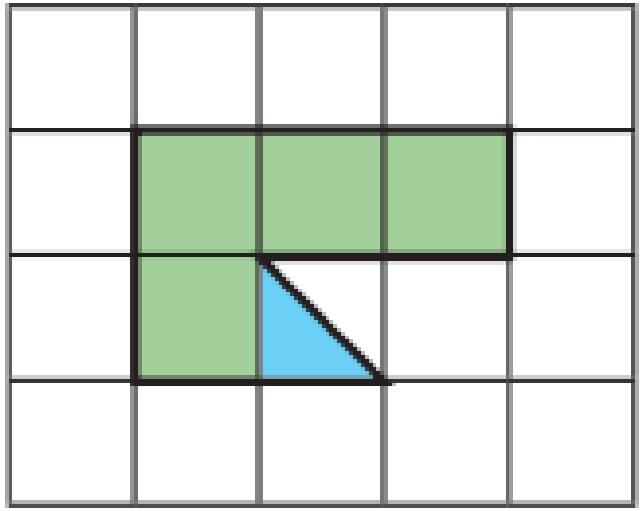
You can check your answers at the end

Question F

What is the area of each shape?



area = ☐ squares



area = ☐ squares

You can check your answers on the NEXT SLIDE

Answers

Starter: 1) 24 2) 18 3) 27

A) A) 9 squares B) 10 squares C) 11 squares C is largest

B) 14 squares

C) A) 4 squares B) 6 squares C) 10 squares

D) Jack is right as they have the same amount of squares

E) A) 7 squares B) 10 squares C) 24 squares

F) 7 squares and 4 ½ squares

Mr Sayer's Maths Group

Tuesday 28th April

LO: Making Shapes

Starter:

1) ¼ of 24 =

2) 1/5 of 30 =

3) ¼ of 44 =

Area – Remember

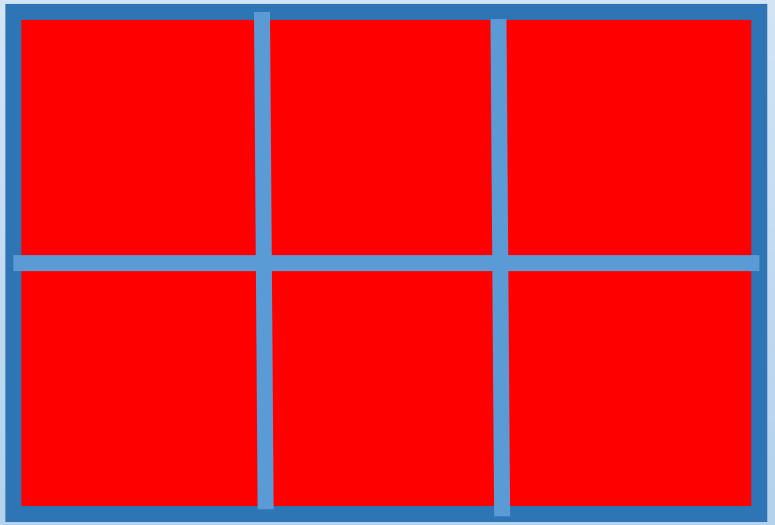
Area is the amount of space occupied by a flat **shape** or the surface of an object.

Looking at the rectangle, the area of it is the entire space inside the edges.

Making shapes with a set Area

Remember to count the squares as you go.

Example – A shape with 6 squares area.

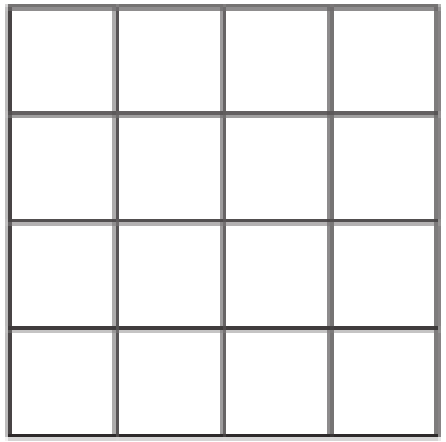


Today you will need to use a squared piece of paper – check your home-learning pack.

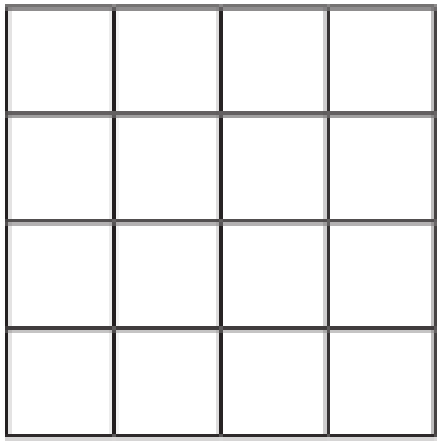
Question A

Draw a shape with the given area.

a) area = 7 squares



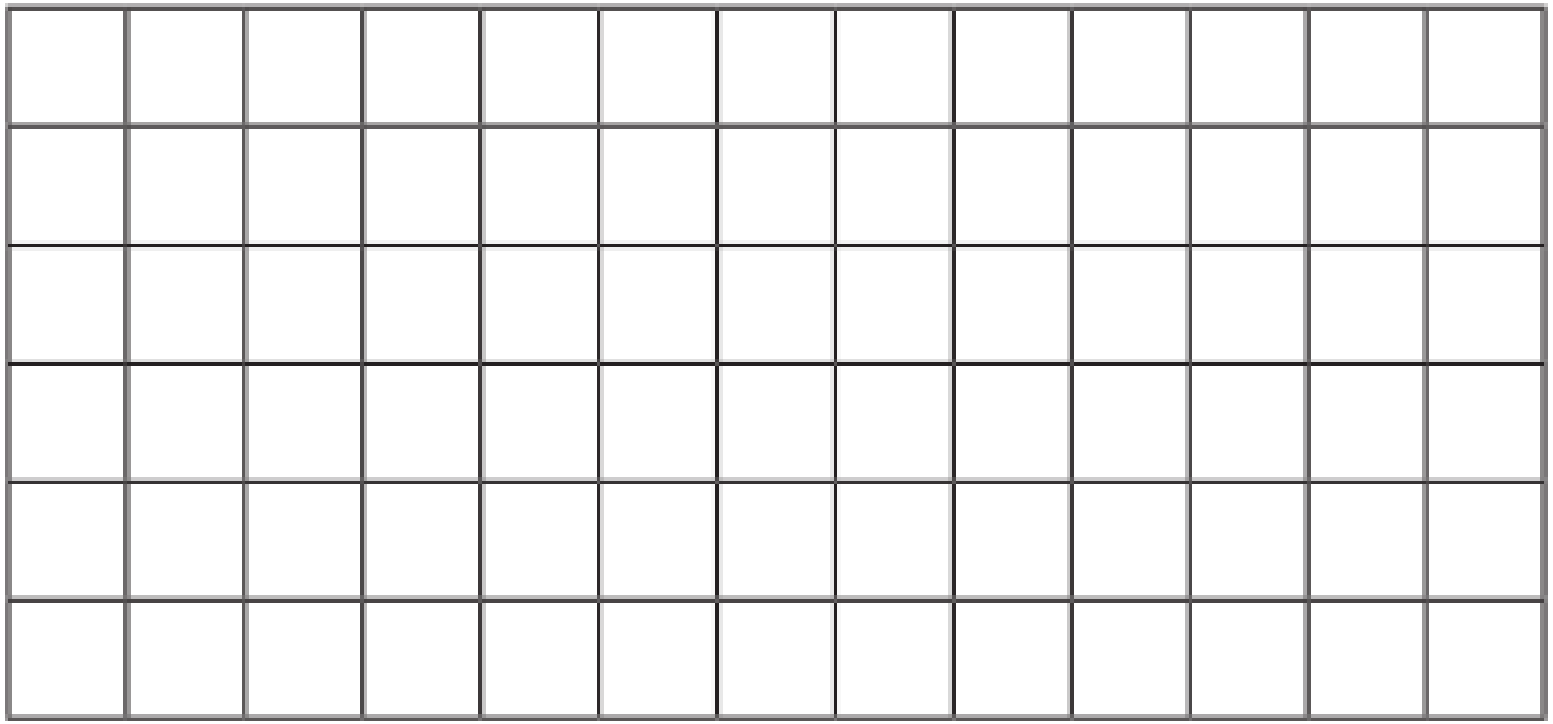
b) area = 13 squares



You can check your answers at the end

Question B

Draw two different shapes, each with an area of 8 squares.



You can check your answers at the end

Question C

I cannot make a large square using an odd number of smaller squares.

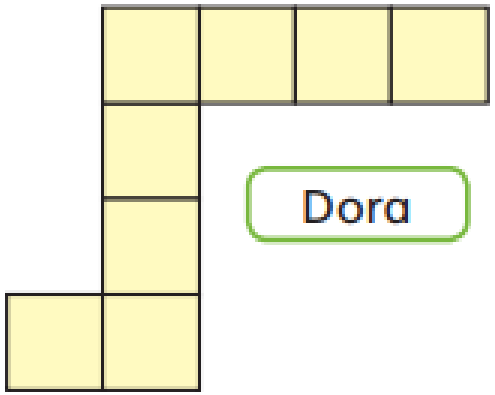
Do you agree with Whitney? _____

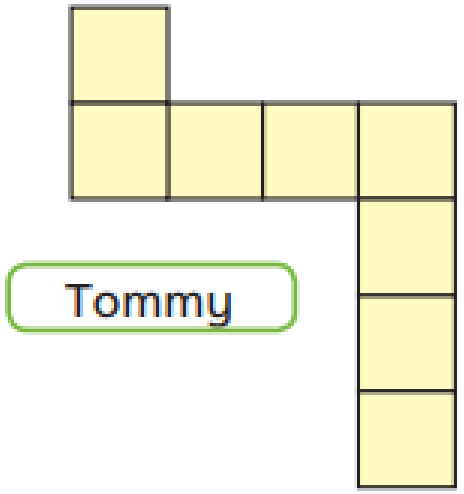
Draw a picture to support your answer.

You can check your answers at the end

Question D

Dora and Tommy have drawn rectilinear shapes.





Tommy says he has made a different shape with the same area.

Do you agree with Tommy? _____

Explain your answer.

You can check your answers on the NEXT SLIDE

Answers

Starter: 1) 6 2) 6 3) 11

A) A) 7 squares coloured in B) 13 squares coloured in

B) 2 different shapes drawn built of 8 squares

C) Because there are 4 sides to a square and 4 lots of any number always makes an even number, i.e 1 x 4 = 4, 2 x 4 = 8 and so on.

D) Tommy and Dora have made the same shape, it has just been rotated.

Mr Sayer's Maths Group

Wednesday 29th April

LO: Comparing Area

Starter:

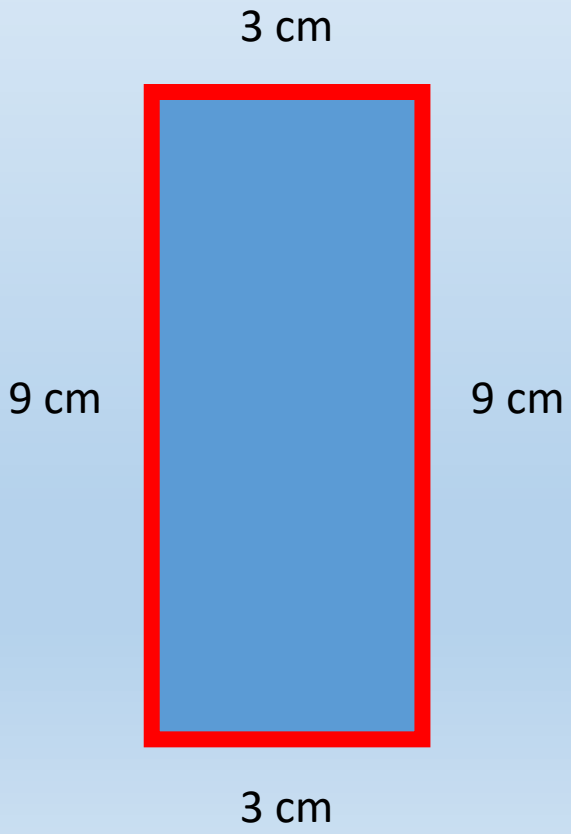
1) 1/4 of 20 =

2) 2/4 of 20 =

3) 3/4 of 20 =

Perimeter – Remember

Remember, perimeter is the total length of the edges of a shape.



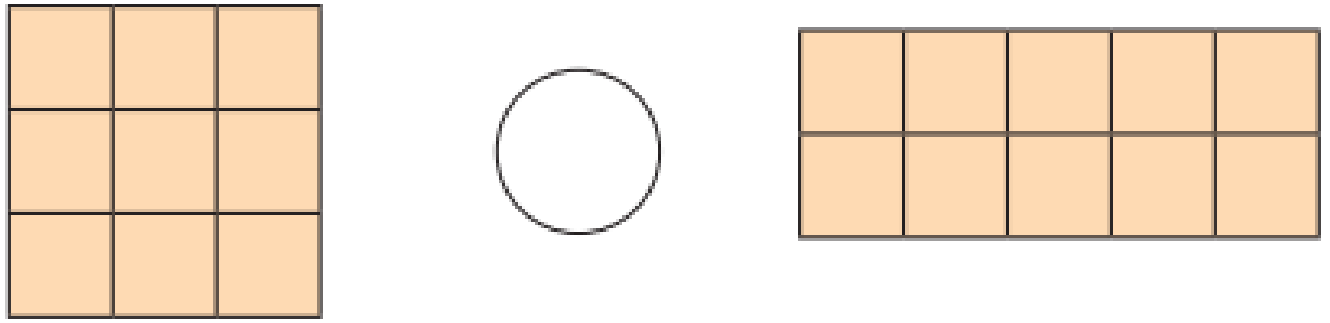
Notice:

The opposite sides of a rectangle are equal in length.

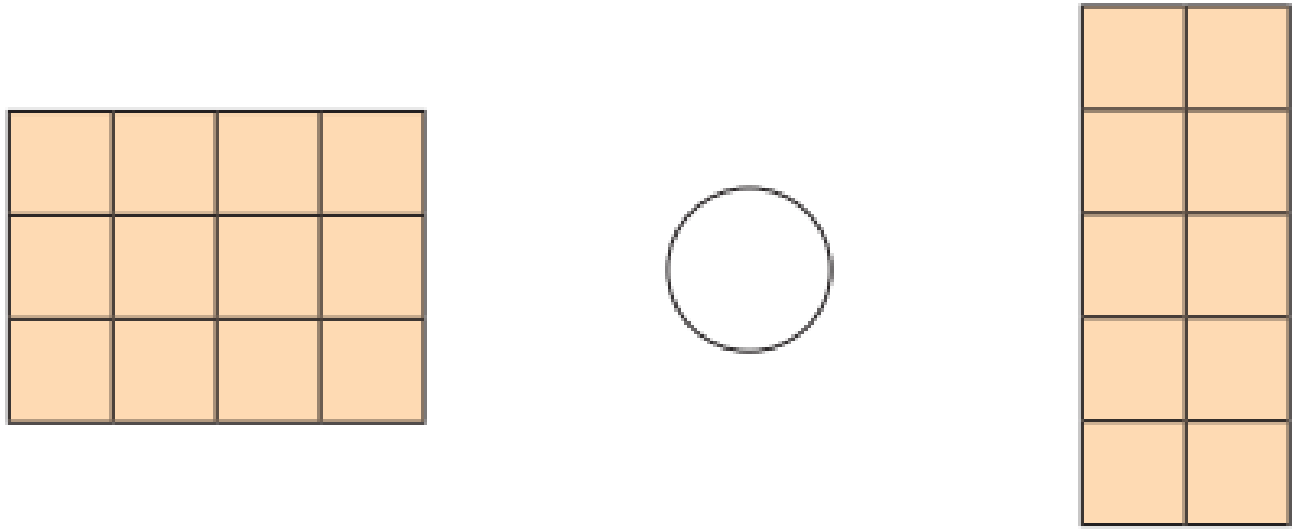
Question A

Write <, > or = to compare the area of the shapes.

a)



b)



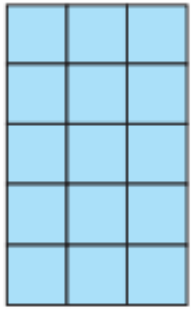
You can check your answers at the end

Question B

Mo draws these two shapes.

A

B



Shape B must have a smaller area than shape A because it is shorter and thinner than shape A.

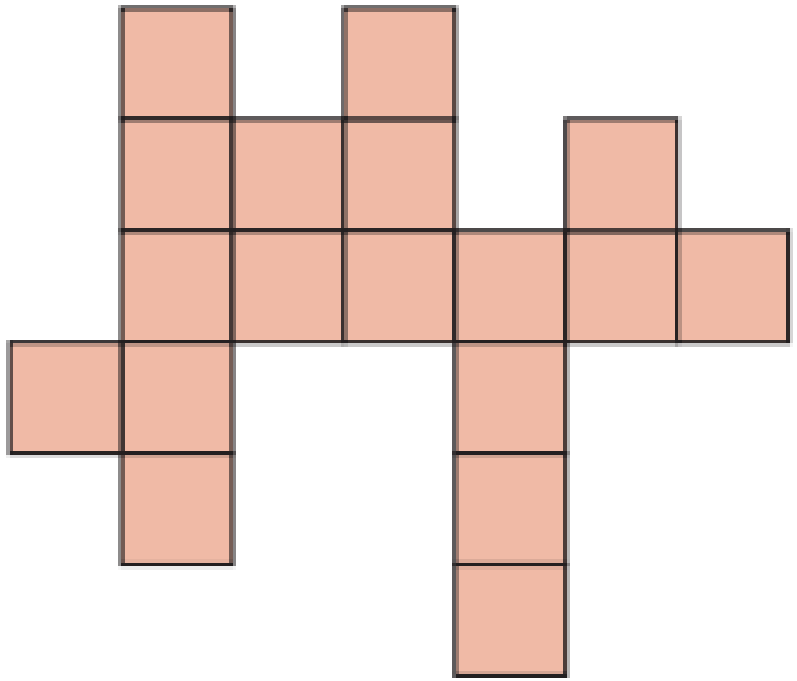
Do you agree with Mo? _____

Explain your reasoning.

You can check your answers at the end

Question C

Here is a shape.



a) What is the area of this shape?

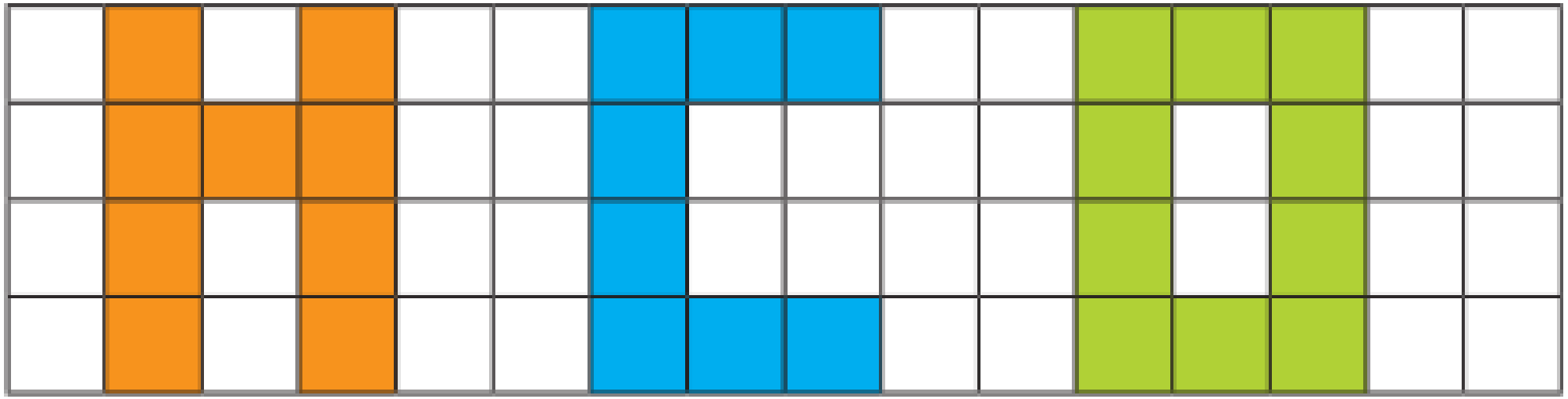
squares

You can check your answers at the end

Question D

Put these letter shapes in order of size.

Start with the shape with the smallest area.



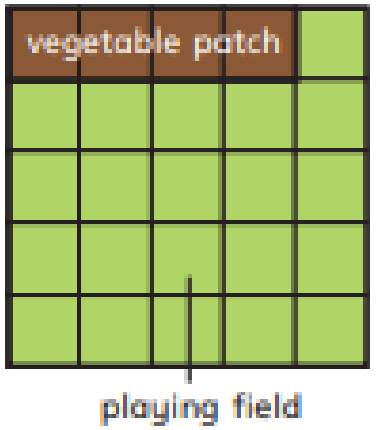
You can check your answers at the end

Question E

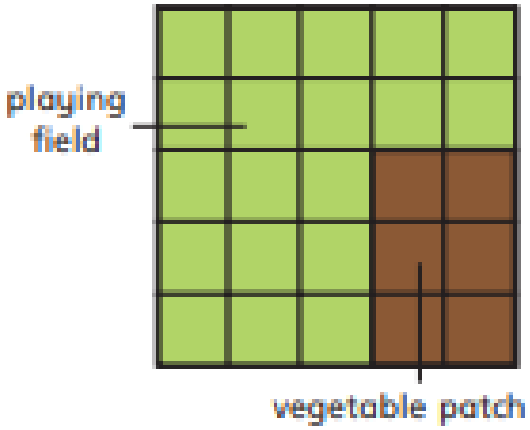
Here are plans of two school fields.

Each has a playing field and a vegetable patch.

High Street School



Main Street School



a) What is the difference in the area of the playing fields?

The difference in area of the playing fields is ☐ squares.

b) What is the difference in the area of the vegetable patches?

The difference in area of the vegetable patches is ☐ squares.

You can check your answers on the NEXT SLIDE

Answers

Starter: 1) 5 2) 10 3) 15

A) A) < B) >

B) Shape B has a larger area because it is made up of more squares.

C) 18 squares

D) C H O

E) A) The difference is 2 squares B) The difference is 2 squares

Mr Sayer's Maths Group

Thursday 30th April

LO: Area and Perimeter

Starter:

1) 1/3 of 24 =

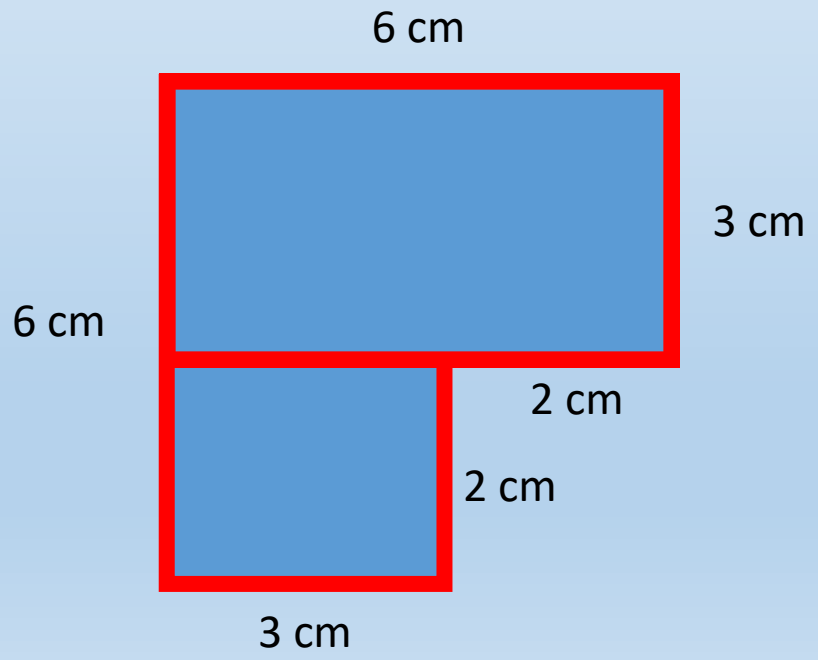
2) 2/3 of 24 =

3) 1/3 of 27 =

Perimeter – Remember

Perimeter is the total length of the edges of a shape.

For this shape, the perimeter would be:



6cm + 6cm + 3cm + 3cm + 2cm + 2cm = 22cm

as these are all the lengths of the edges.

Area – Remember

Area is the amount of space occupied by a flat **shape** or the surface of an object.

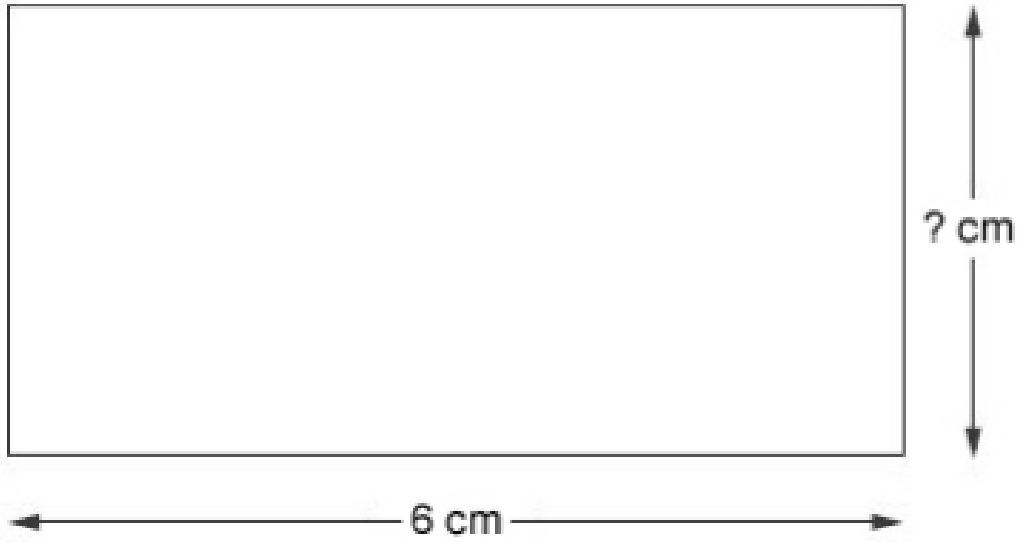
Looking at the rectangle, the area of it is the entire space inside the edges.

Question A

The **perimeter** of this rectangle is 20 cm.

The **length** is 6 cm.

not to scale



How long is the **width** of the rectangle?

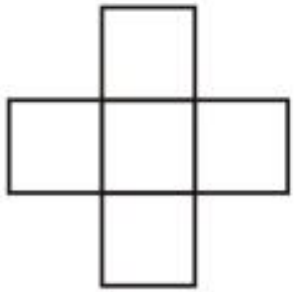
cm

You can check your answers at the end

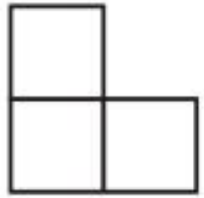
Question B

Here are more shapes made with centimetre squares.

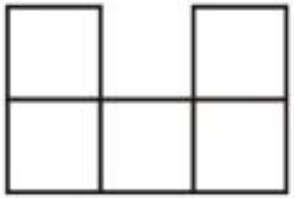
A



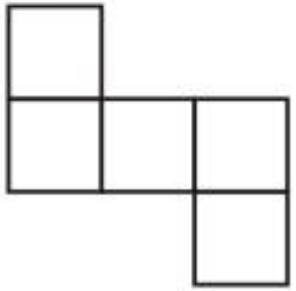
B

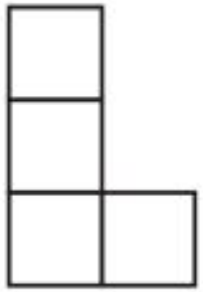


C

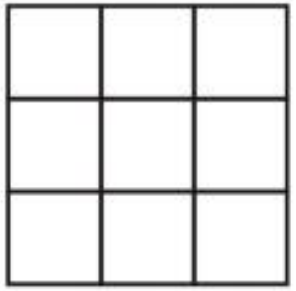


D

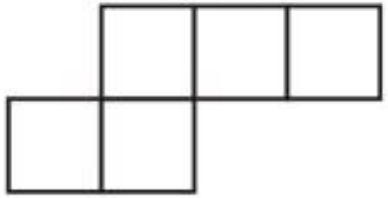




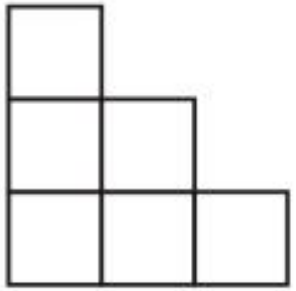
E



F



G



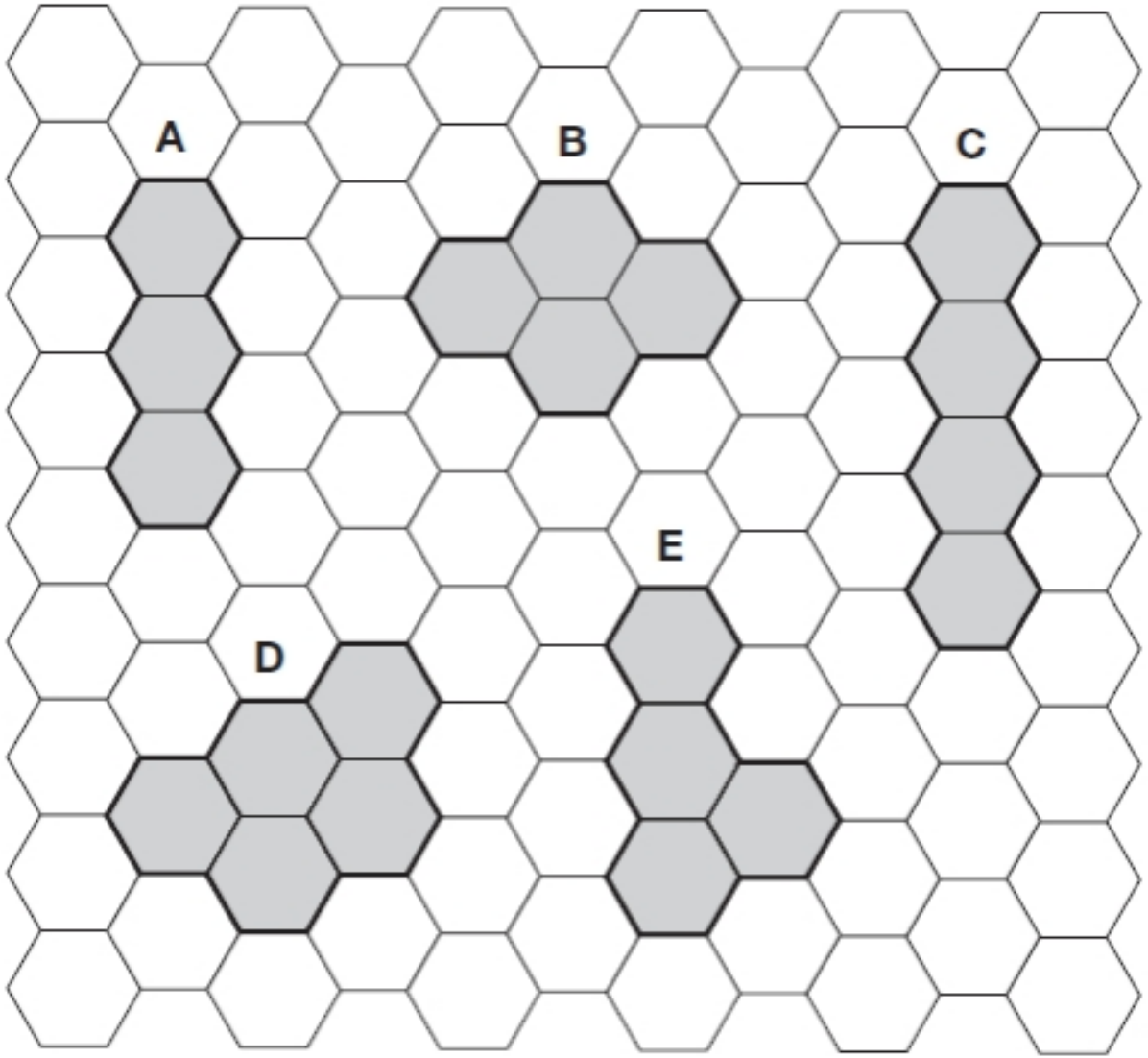
H

Which shape has a **perimeter** of 10 cm?

You can check your answers at the end

Question C

Here are five shapes on a regular grid.



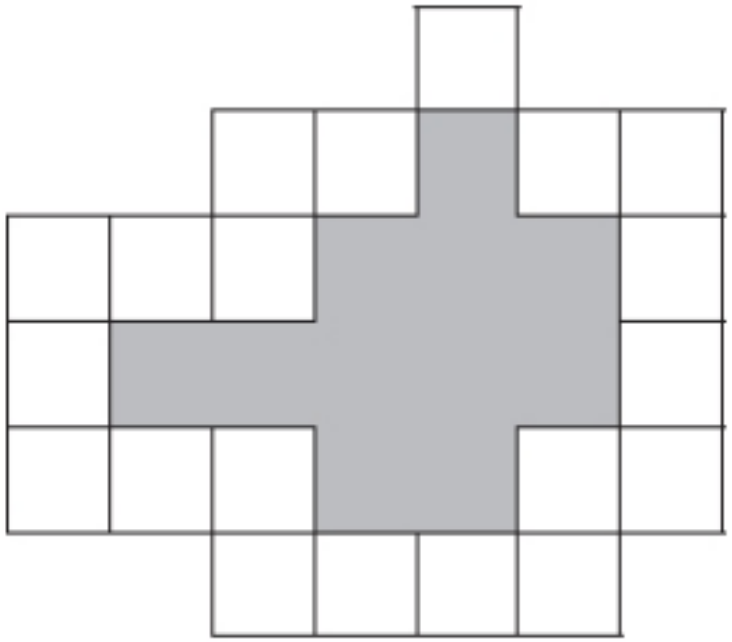
Which shape has the longest **perimeter**?

Which shape has only one **line of symmetry**?

You can check your answers at the end

Question D

Here is a set of 20 squares around a shaded space.



What is the area of the shaded space?

squares

You can check your answers on the NEXT SLIDE

Answers

Starter: 1) 8 2) 16 3) 9

A) 4cm

B) Shape E has a perimeter of 10

C) A) c B) d

D) C H O

E) 11 squares

Mr Sayer's Maths Group

Friday 1st May

LO: Area and Perimeter

Starter:

1) 2/5 of 25 =

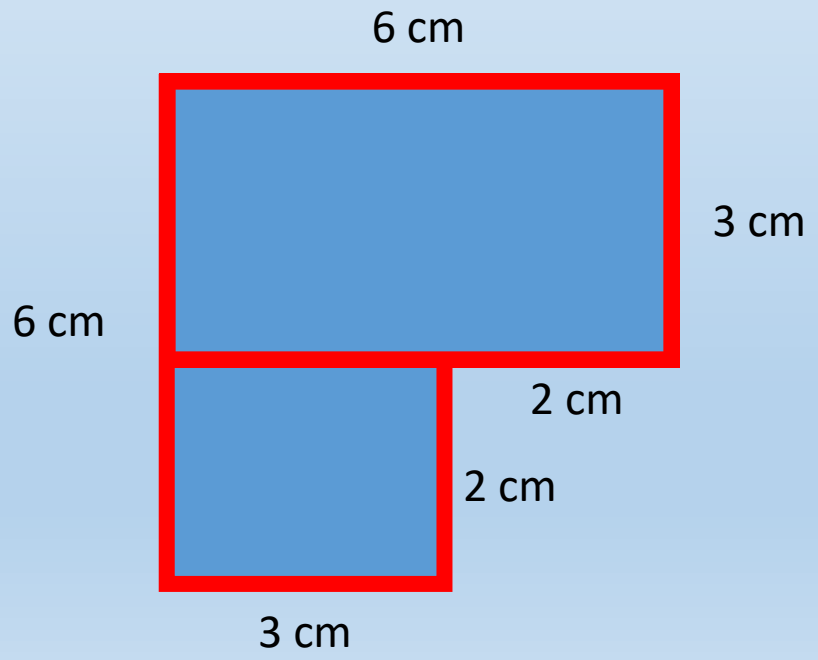
2) 3/10 of 20 =

3) ¾ of 16 =

Perimeter – Remember

Perimeter is the total length of the edges of a shape.

For this shape, the perimeter would be:



6cm + 6cm + 3cm + 3cm + 2cm + 2cm = 22cm

as these are all the lengths of the edges.

Area – Remember

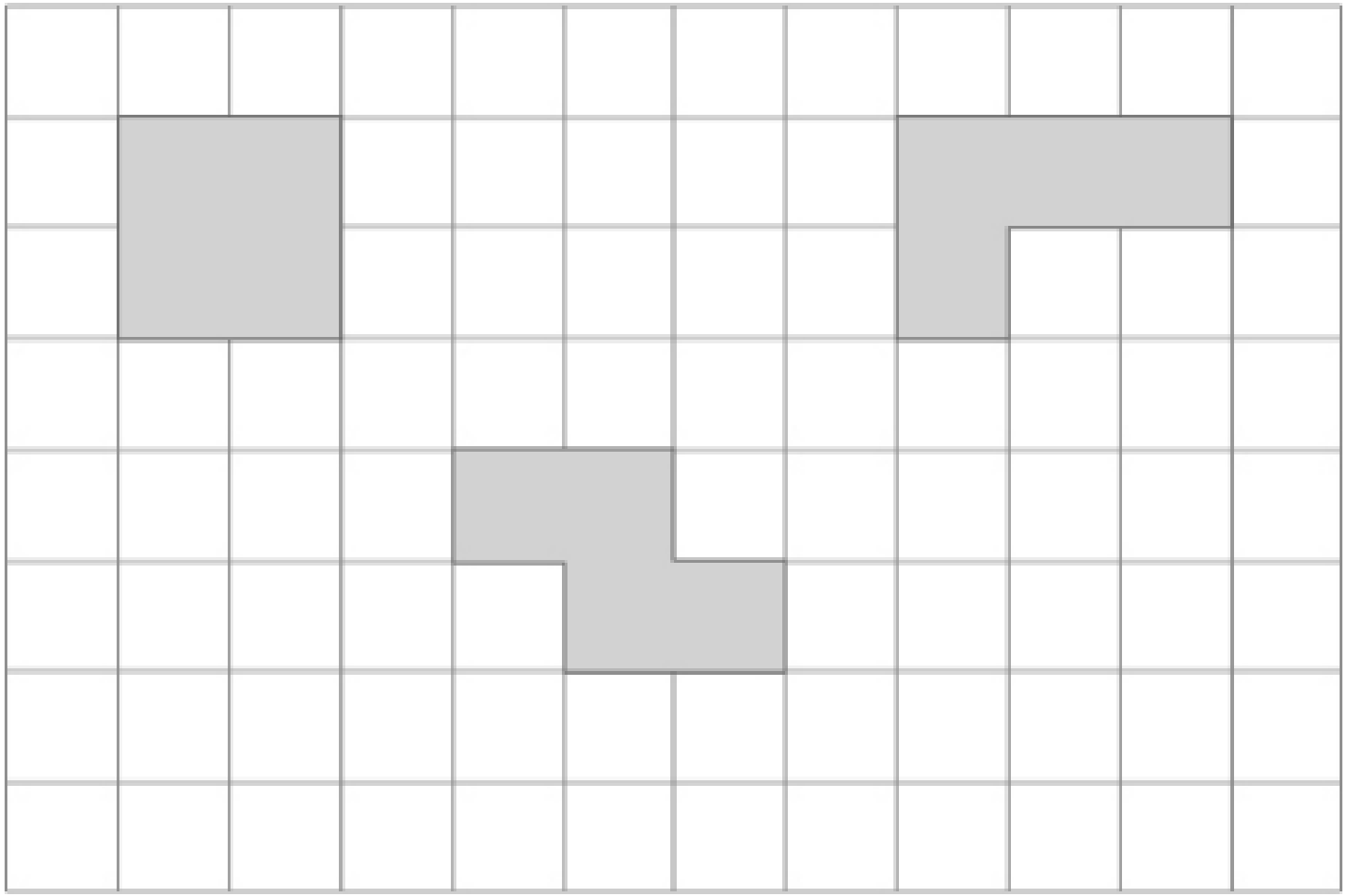
Area is the amount of space occupied by a flat **shape** or the surface of an object.

Looking at the rectangle, the area of it is the entire space inside the edges.

Question A

Rose made shapes using four squares.

She calculated the perimeter of each shape.



What is the length of the **shortest** perimeter?

What is the length of the **longest** perimeter?

You can check your answers at the end

Question B

not actual size

Calculate the perimeter of this square.

cm

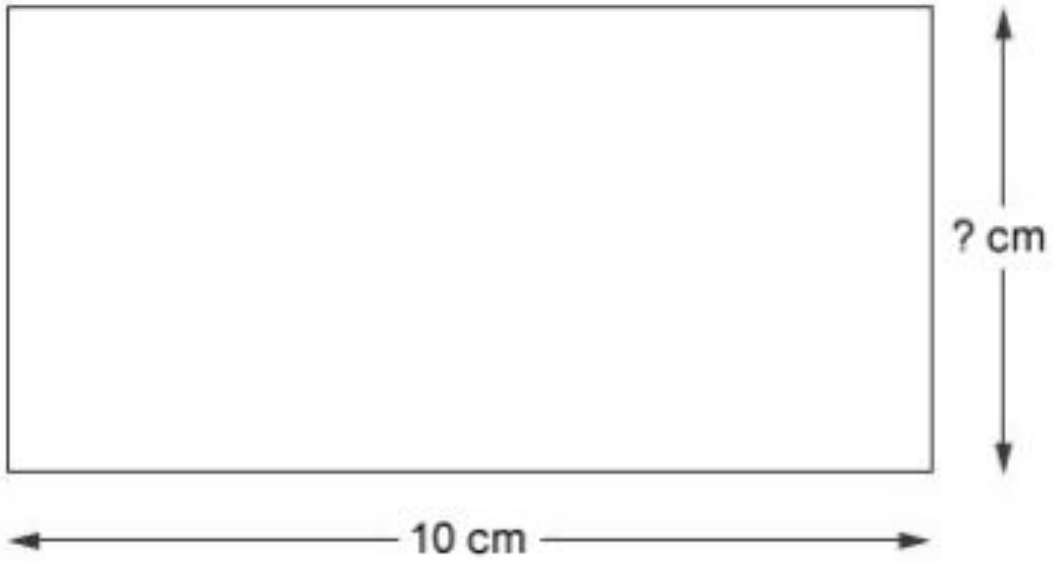
You can check your answers at the end

Question C

Grace and Ben each drew a rectangle with a perimeter of 28 cm.

Ben's rectangle was 10 cm long.

not drawn accurately

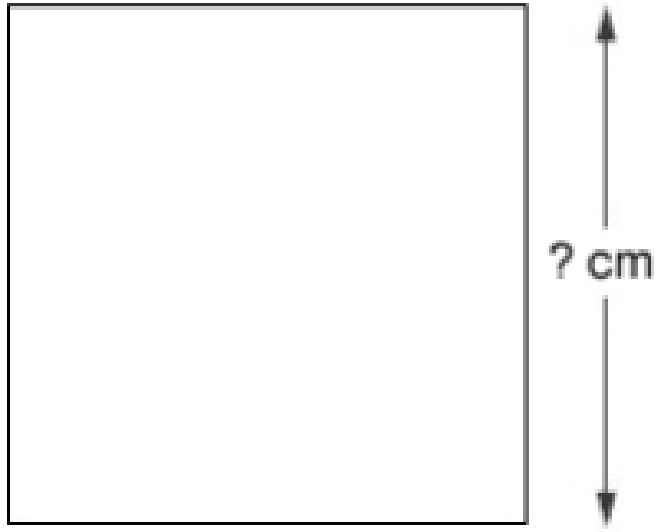


How wide was his rectangle?

Grace's rectangle was a square.

It also had a perimeter of 28 cm.

not drawn accurately

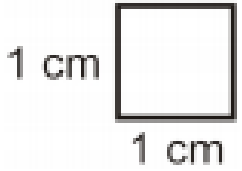


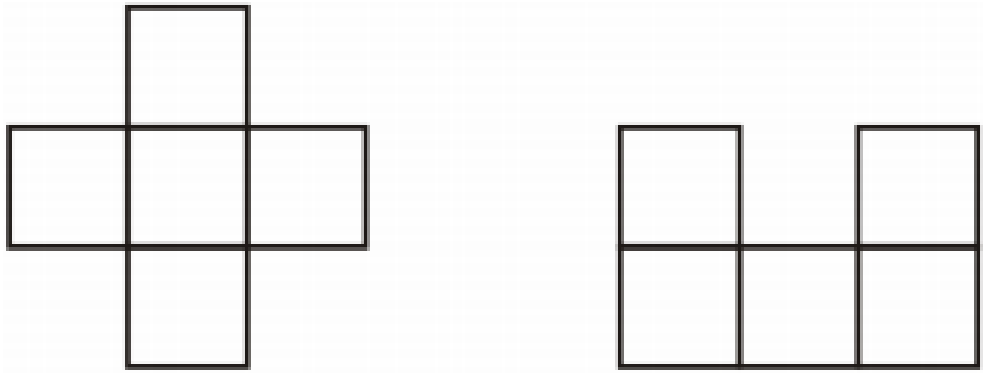
What is the side length of her square?

You can check your answers at the end

Question D

Here are two shapes made with centimetre squares.





Each shape has 5 squares.

Write **ONE** other thing which is the **same** about the two shapes.

You can check your answers on the NEXT SLIDE

Answers

Starter: 1) 10 2) 6 3) 12

A) A) 8 units B) 10 units

B) 32cm

C) A) 4cm B) 7cm

D) “They are symmetrical.” “Each has three squares across.” “Both have the same perimeter.” “They have 4 joined-on lines.” “They have the same area.”