



**Bishops
Online
Tutoring**



Education Consultancy

Edexcel GCSE Mathematics

CONGRUENT SHAPES

Materials Required:

- Pen
- HB Pencil
- Ruler (in centimetres and millimetres)
- Protractor
- Compass

Instructions:

- Use a black ink pen to answer all questions
- Fill your name in the section below
- Answer the questions in the spaces provided
- Show your working out for all answers

Information:

- The marks allocated for each question are displayed within brackets – utilise this information to gauge the appropriate amount of time to dedicate to each question
- Questions marked with an asterisk (*) will assess your written communication; be careful of spelling, punctuation and grammar with these questions

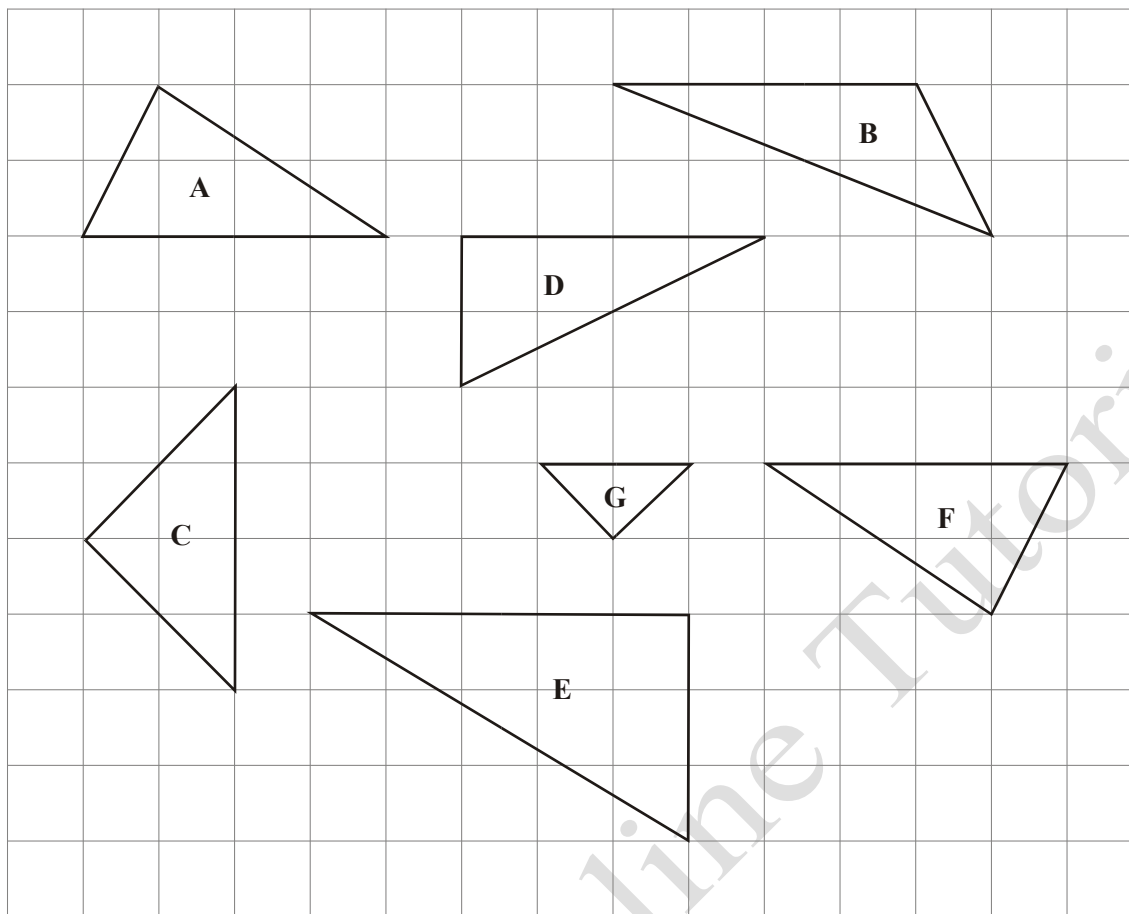
Advice:

- Carefully read the question before attempting to answer it
- Be vary of time and try to answer every question
- If you have enough time in the end, go back and check your answers. A good way to check your answers is to retry the question with the hope of getting the same answer as before without looking at your working out from before

NO CALCULATOR ALLOWED

NAME:	
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1.



(a) Write down the letter of an **isosceles** triangle.

..... **C**

(1)

(b) Write down the letters of **two** triangles which are congruent.

..... **A** and **F**

(1)

Triangle **C** is an enlargement of triangle **G**.

(c) Write down the scale factor of this enlargement.

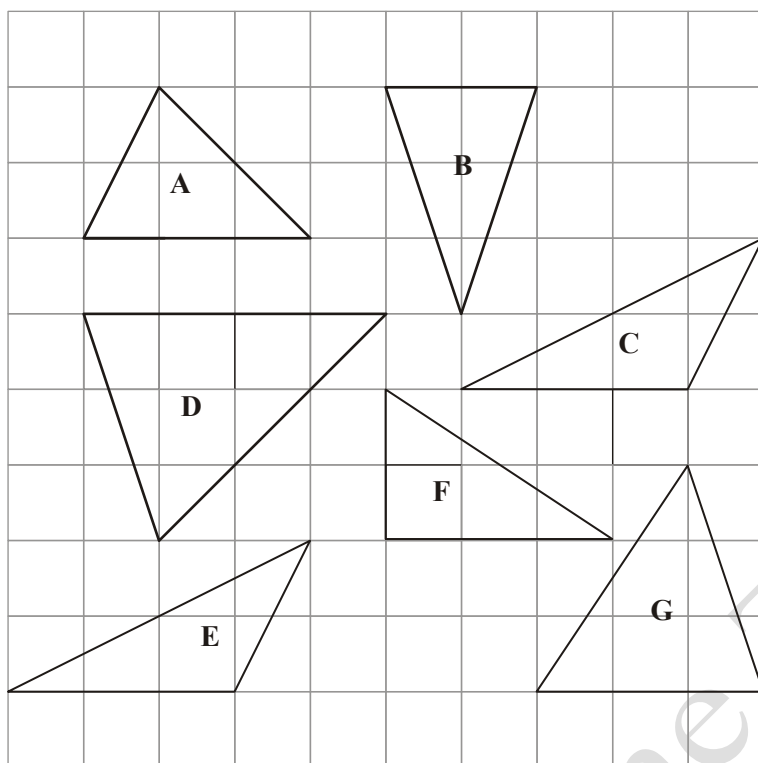
..... **2**

(1)

(Total 3 marks)

2.

Here are some triangles.



(a) Write down the letter of the triangle that is

(i) right-angled,

.....F.....

(ii) isosceles.

.....B.....

(2)

Two of the triangles are congruent.

(b) Write down the letters of these two triangles.

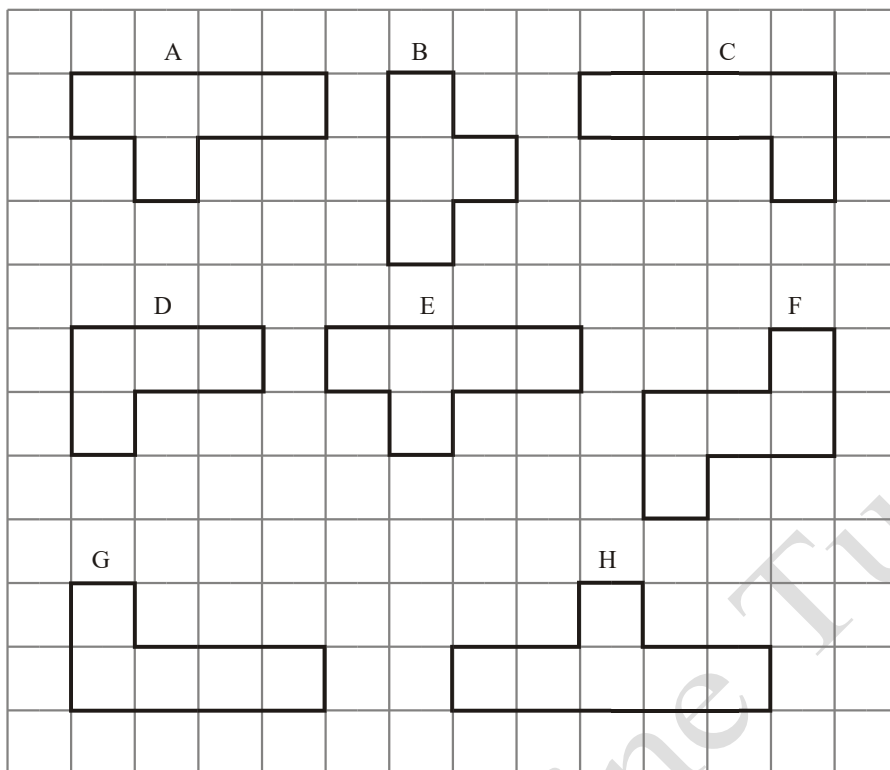
.....C..... andE.....

(1)

(Total 3 marks)

3.

Here are 8 shapes.

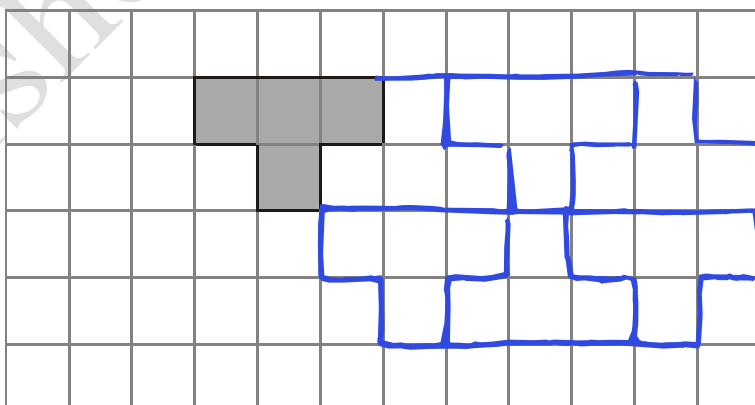


- (a) Write down the letters of two **different** pairs of congruent shapes.

A and E
G and C

(2)

- (b) On the grid, show how the shaded shape will tessellate. You must draw **at least 6** shapes.

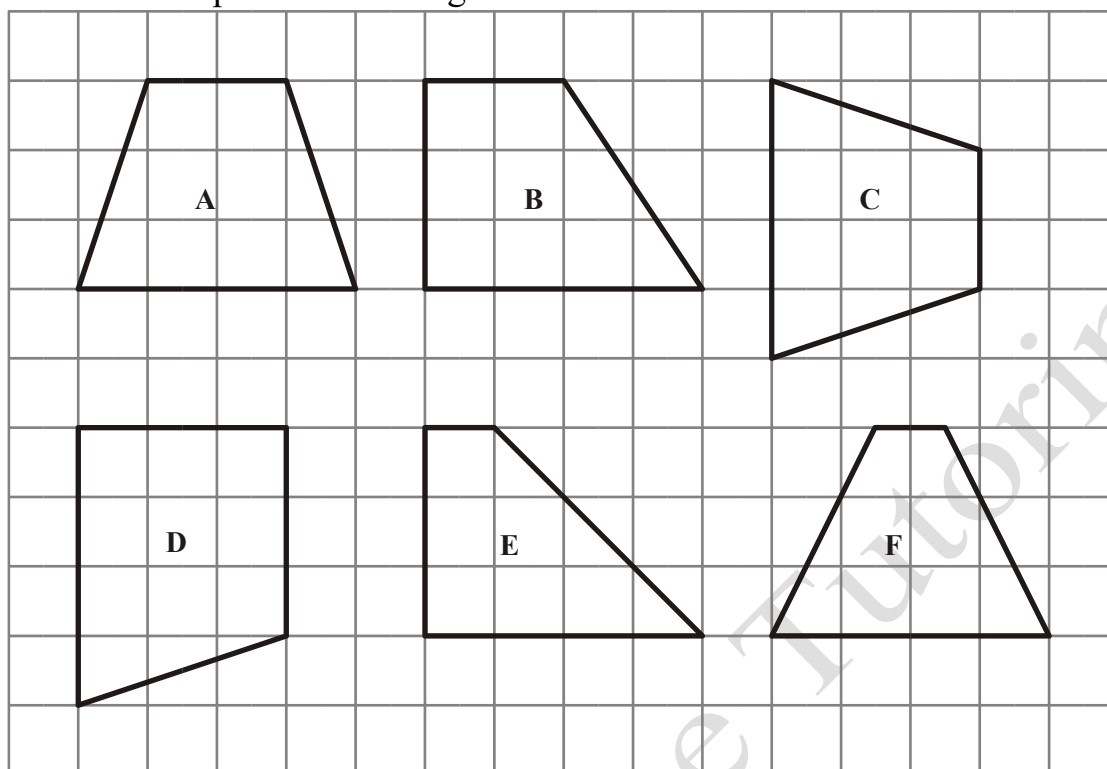


(2)

(Total 4 marks)

4.

Here are 6 shapes drawn on a grid.



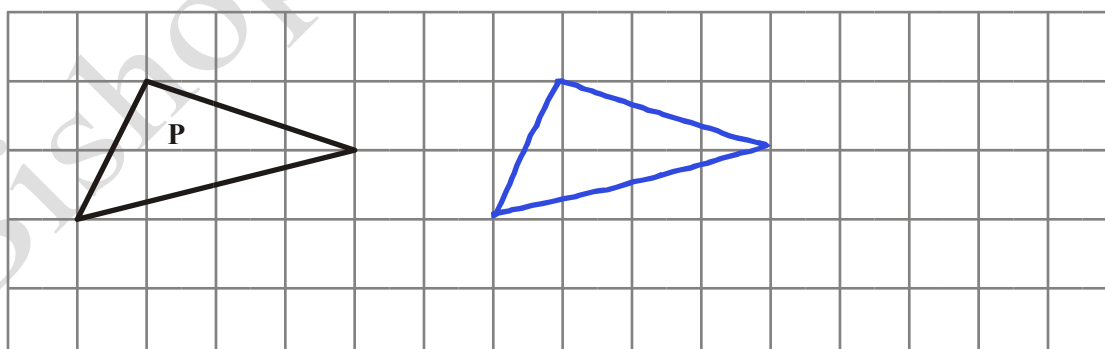
Two of these shapes are congruent.

(a) Write down the letters of these two shapes.

.....**A**..... and**C**.....

(1)

(b) On the grid below, draw a shape that is congruent to shape P.

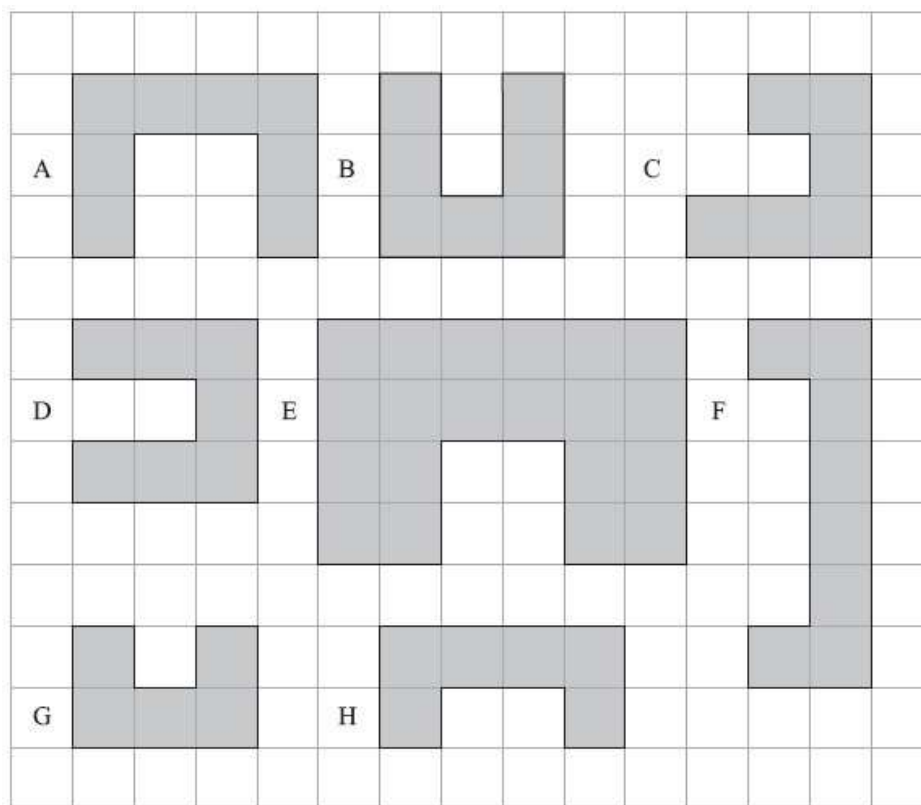


(1)

(Total 2 marks)

5.

These shapes have been drawn on a grid of centimetre squares.



(a) (i) Write down the letters of a pair of shapes that are congruent.

..... **B** and **D**

(ii) Write down the letters of a different pair of shapes that are similar.

..... **G** and **E**

(2)

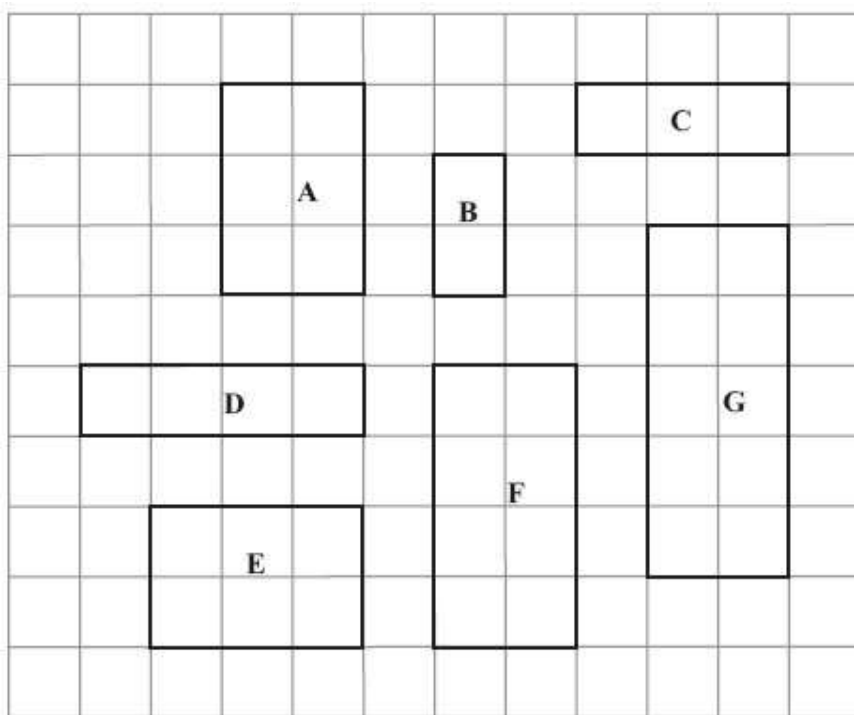
(b) Find the perimeter of shape D.

..... **16** cm

(1)

(Total 3 marks)

6. Here are some rectangles on a grid of centimetre squares.



(a) Find the area of rectangle **G**.

$$2 \times 5 = 10$$

.....10.....cm²
(1)

(b) Find the perimeter of rectangle **B**.

.....6.....cm
(1)

Two of the rectangles are congruent.

(c) Write down the letters of these two rectangles.

.....A..... andE.....
(1)

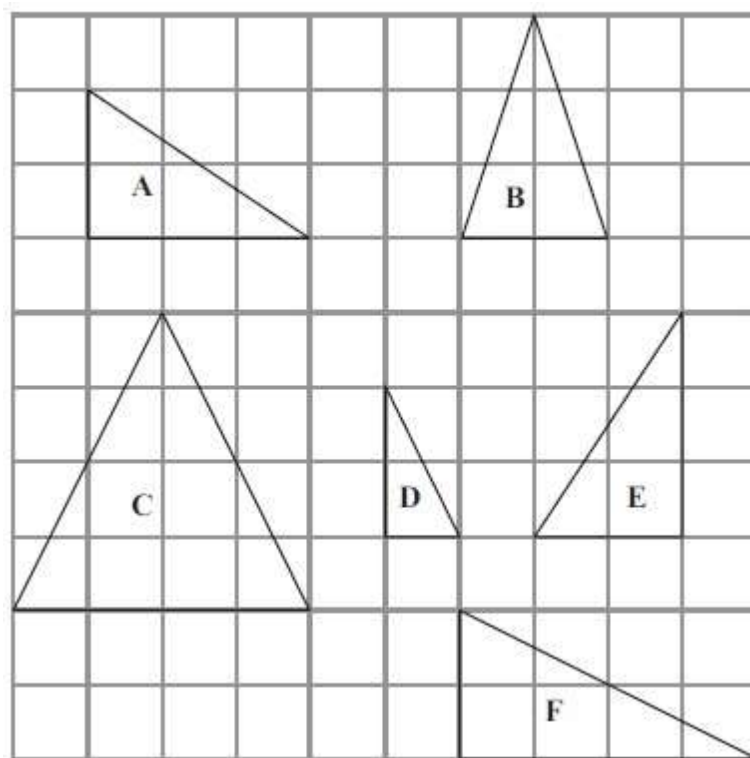
Rectangle **F** is an enlargement of rectangle **B**.

(d) Write down the scale factor of the enlargement.

.....2.....
(1)

(Total 4 marks)

7. Here are some triangles drawn on a square grid.



Two of the triangles are congruent.

(a) Write down the letters of these two triangles.

..... **A** and **E**
(1)

One of the triangles is an enlargement of another of the triangles.

(b) Write down the letters of these two triangles.

..... **D** and **F**
(1)

Two of the triangles each have one line of symmetry.

(c) Write down the letters of these two triangles.

..... **C** and **B**
(1)

(Total 3 marks)