Edexcel GCSE
Mathematics (Linear) – 1MA0

CONGRUENT SHAPES

Materials required for examination
Ruler graduated in centimetres and
millimetres, protractor, compasses,
pen, HB pencil, eraser.
Tracing paper may be used.

Items included with question papers
Nil

Instructions

Use black ink or ball-point pen.
Fill in the boxes at the top of this page with your name, centre number and candidate number.
Answer all questions.
Answer the questions in the spaces provided – there may be more space than you need.
Calculators may be used.

Information

The marks for each question are shown in brackets – use this as a guide as to how much time to
spend on **each** question.
Questions labelled with an **asterisk** (*) are ones where the quality of your written communication
will be assessed – you should take particular care on these questions with your spelling, punctuation
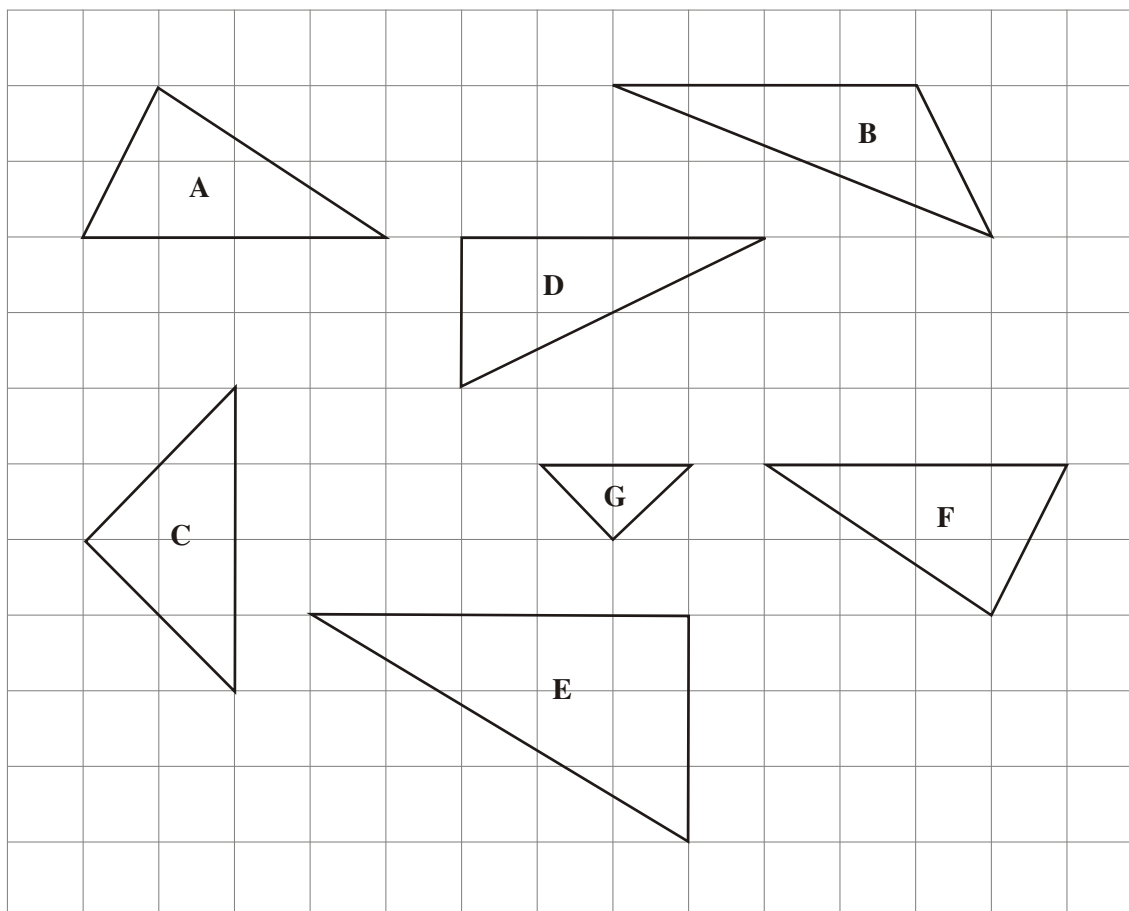and grammar, as well as the clarity of expression.

Advice

Read each question carefully before you start to answer it.
Keep an eye on the time.
Try to answer every question.
Check your answers if you have time at the end.

1.

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

....

(1)

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

.... and ....

(1)

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

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

....

(1)
(Total 3 marks)

2. Here are some triangles.
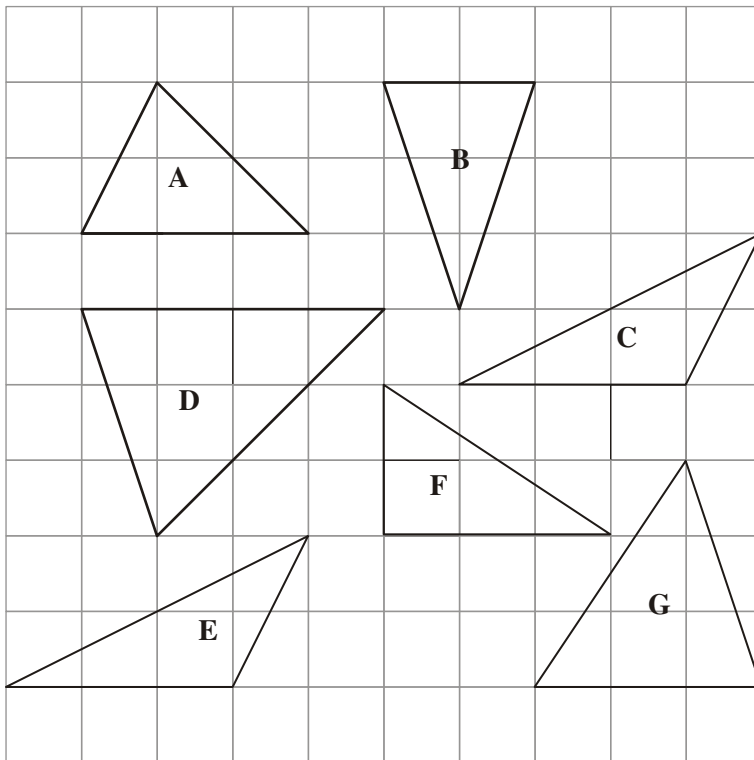
(a) Write down the letter of the triangle that is

 (i) right-angled,

 ....

 (ii) isosceles.

 ....

 (2)

Two of the triangles are congruent.

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

 .... and ....

 (1)
 (Total 3 marks)

3. Here are 8 shapes.
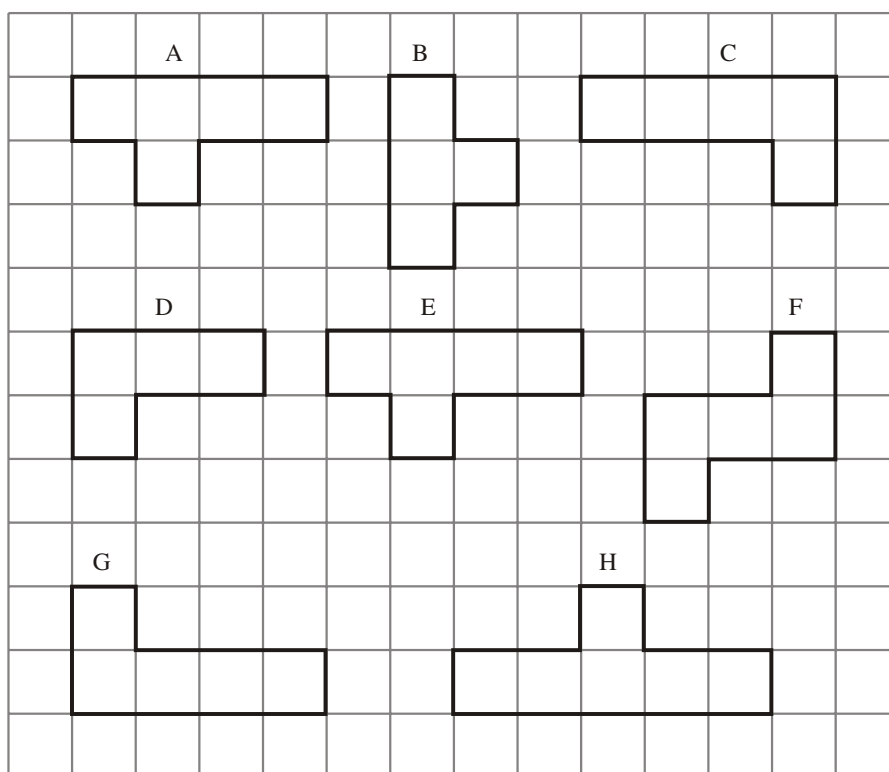
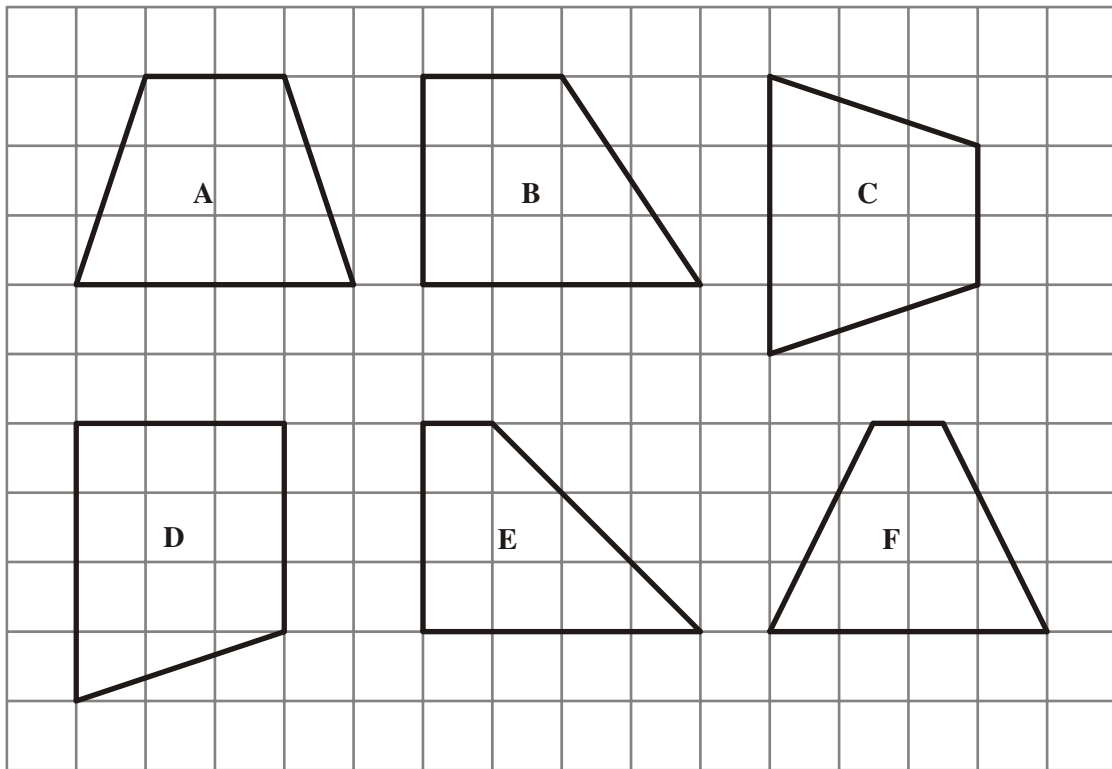(a) Write down the letters of two **different** pairs of congruent shapes.

.... and ....

.... and ....

(2)

(b) On the grid, show how the shaded shape will tessellate.
You must draw at least 6 shapes.
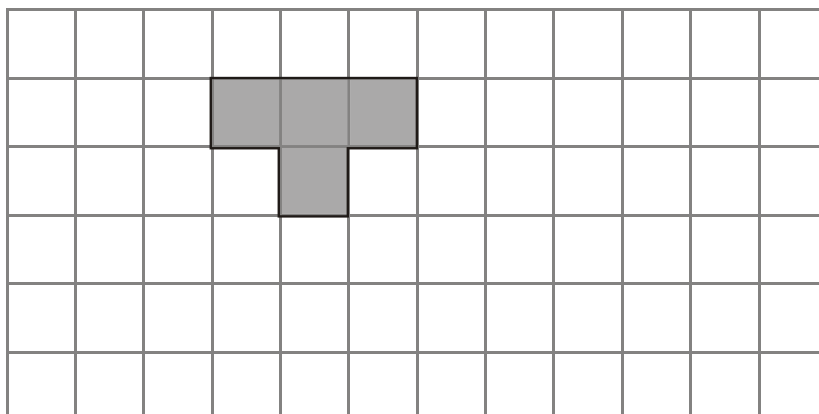
(2)
(Total 4 marks)
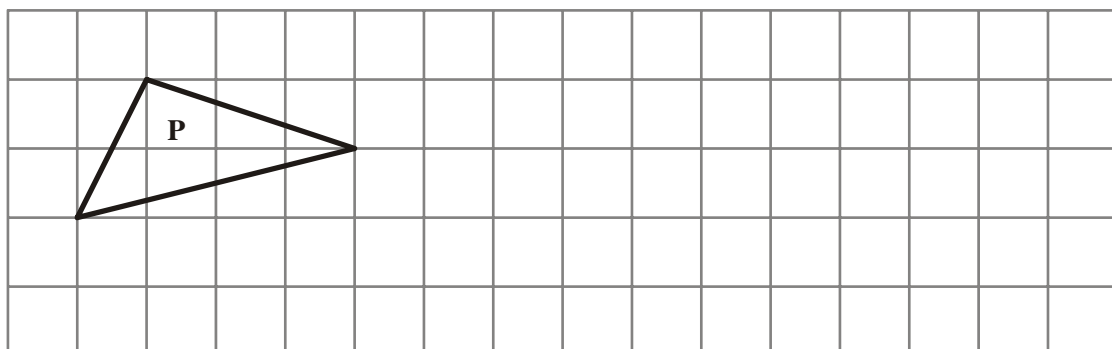
4. Here are 6 shapes drawn on a grid.

Two of these shapes are congruent.

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

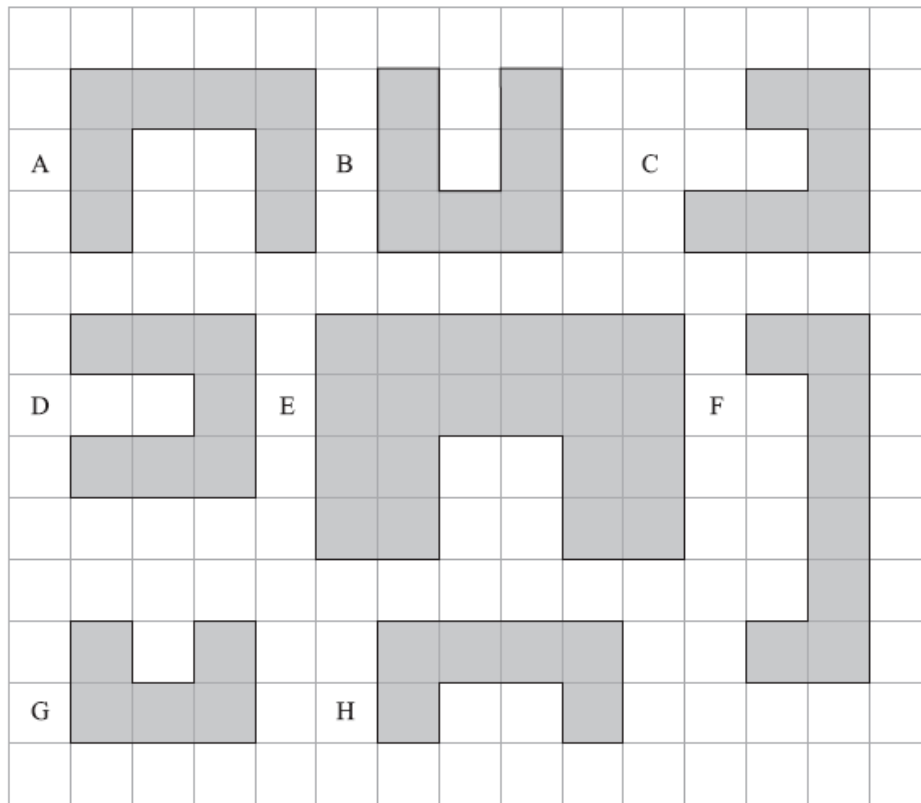........................ and ....

(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.

.... and ....

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

.... and ....

(2)

(b) Find the perimeter of shape D.

.... cm

(1)

(Total 3 marks)

6. Here are some rectangles on a grid of centimetre squares.
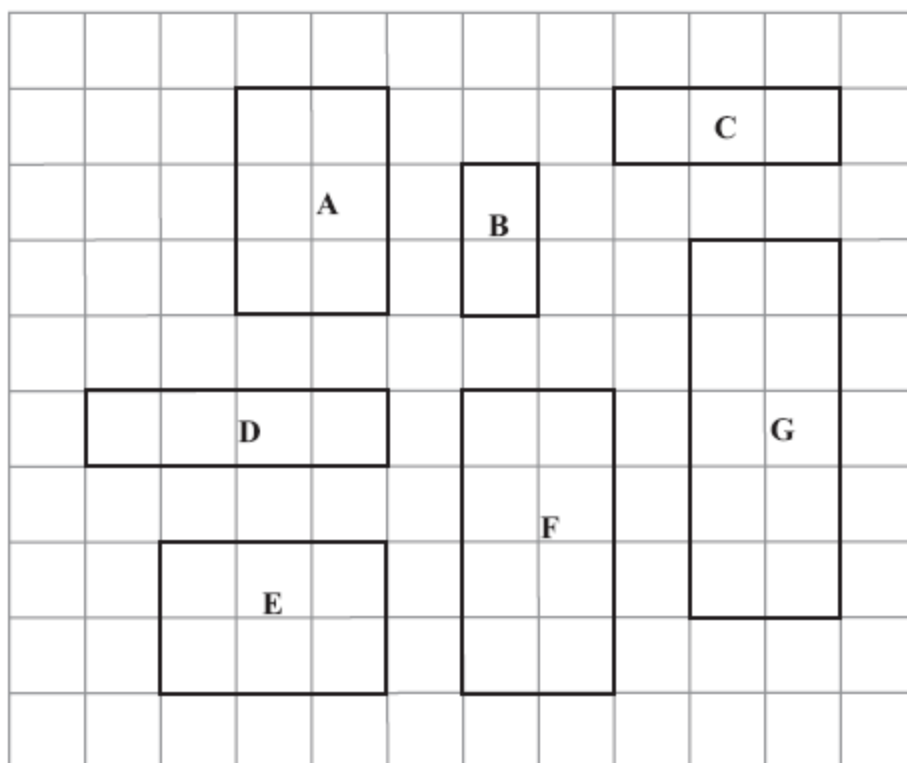
(a) Find the area of rectangle **G**.

...............................cm^2

(1)

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

...............................cm

(1)

Two of the rectangles are congruent.

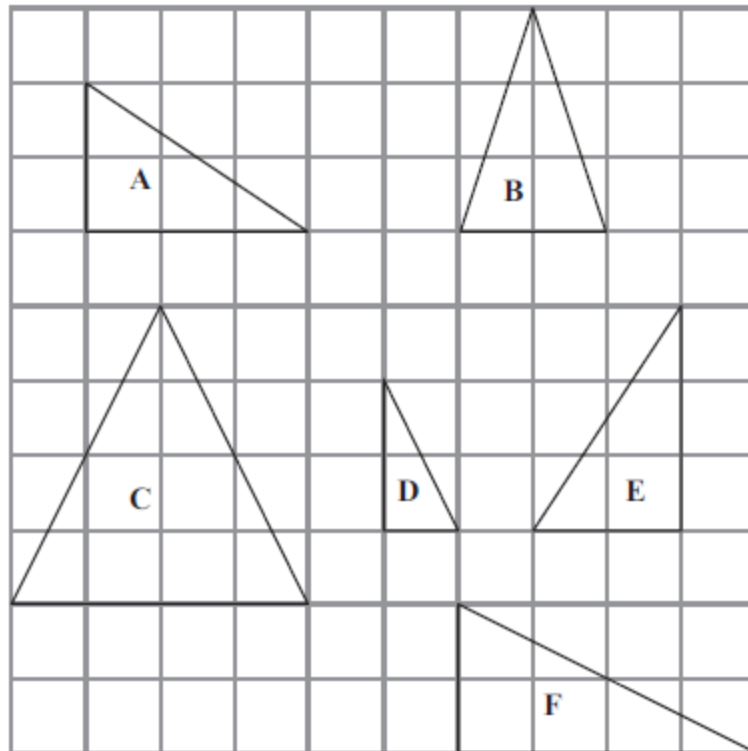(c) Write down the letters of these two rectangles.

.... and ....

(1)

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

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

....

(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.

.... and ....
(1)

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

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

.... and ....
(1)

Two of the triangles each have one line of symmetry.

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

.... and ....
(1)

(Total 3 marks)