

**GCSE QUESTIONS**

Q1.

Here is a triangle.

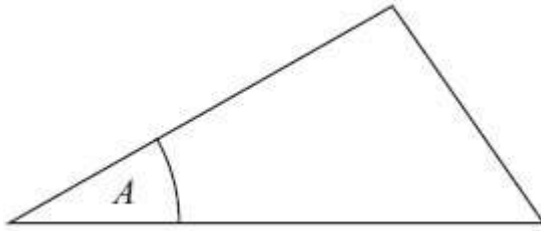


Diagram **NOT** accurately drawn

The perimeter of the triangle is 10 cm.  
 Angle  $A = 40^\circ$ .

The triangle is enlarged by a scale factor of 3

- (i) Write down the perimeter of the enlarged triangle.

.....

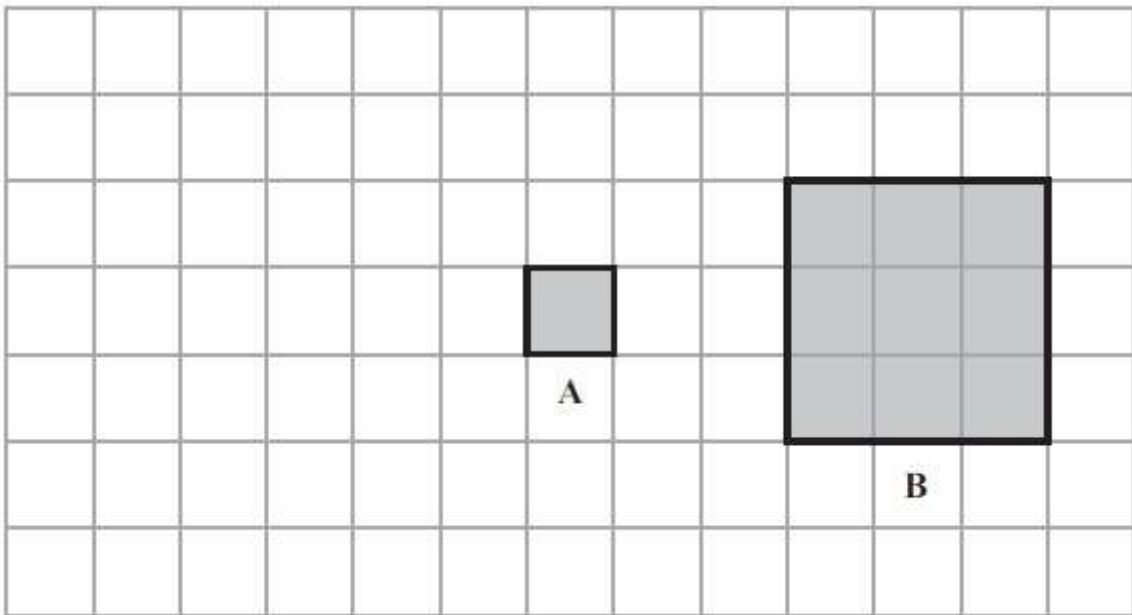
- (ii) Write down the size of angle  $A$  in the enlarged triangle.

.....

(Total for Question is 2 marks)

Q2.

Here are two squares.



Square **B** is an enlargement of square **A**.

- (a) What is the scale factor of the enlargement?

.....

(1)

Square **A** is moved 4 squares to the left.

- (b) On the grid, draw the new position of square **A**.

(1)

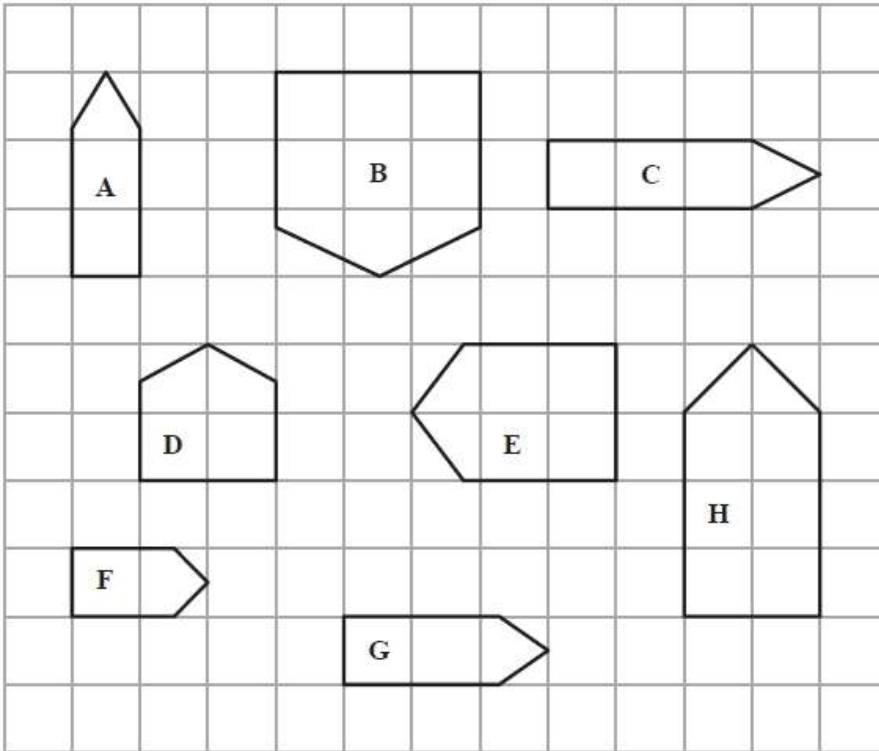
(c) In the space, draw accurately a square with side of length 4 cm.

(2)

(Total for Question is 4 marks)

**Q3.**

Here are eight shapes drawn on a grid of centimetre squares.



Two of these shapes are congruent.

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

..... and .....

(1)

Shape **H** is an enlargement of one of the other shapes.

(b) Which shape?

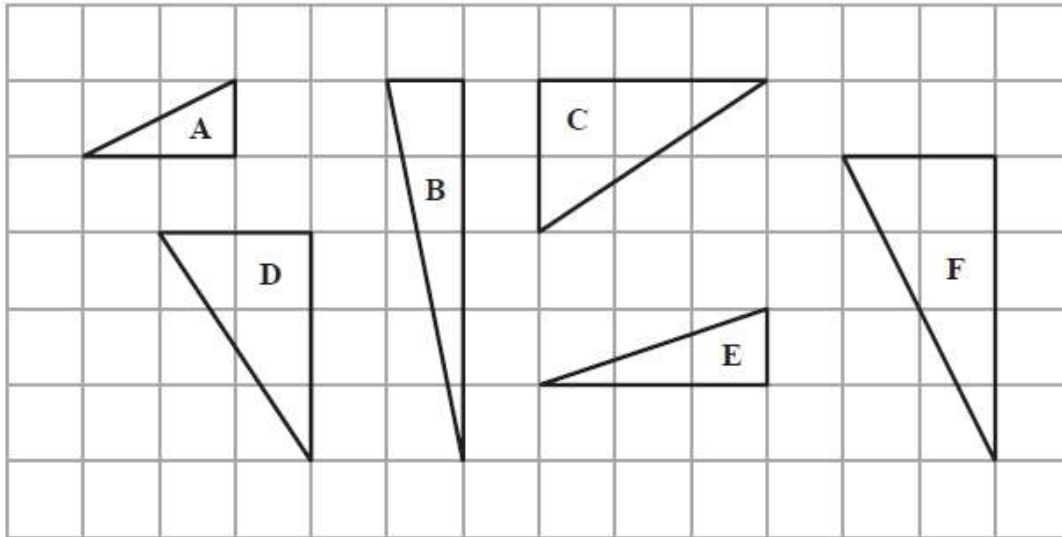
.....

(1)

(Total for question = 2 marks)

**Q4.**

Here are some triangles drawn on a grid.



Two of the triangles are congruent.

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

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

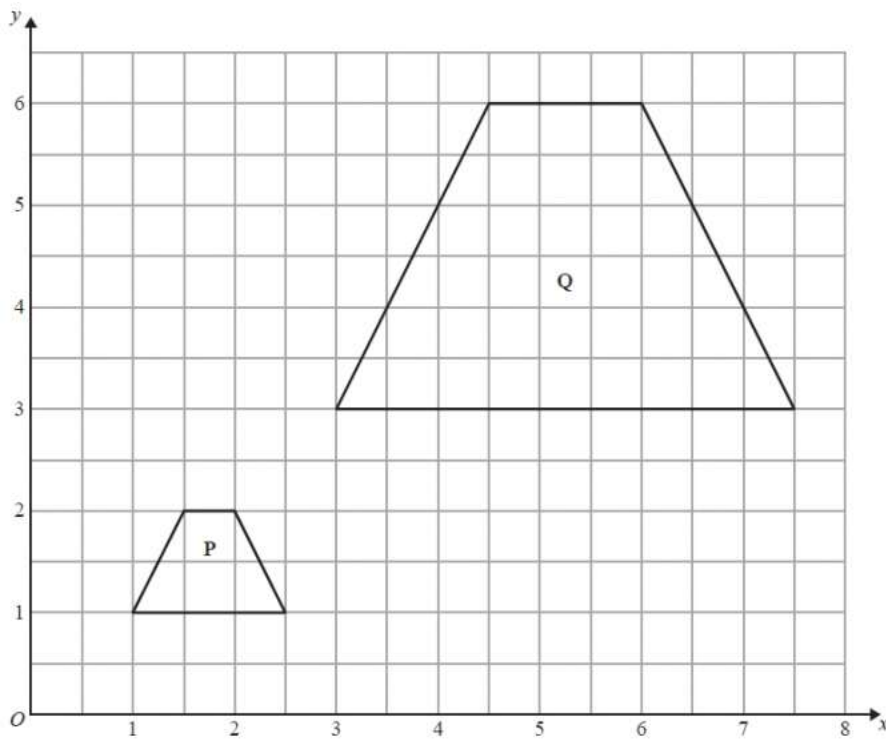
One of the triangles is an enlargement of triangle **A**.

(b) (i) Write down the letter of this triangle.

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

.....  
 ..... (2)  
**(Total for Question is 3 marks)**

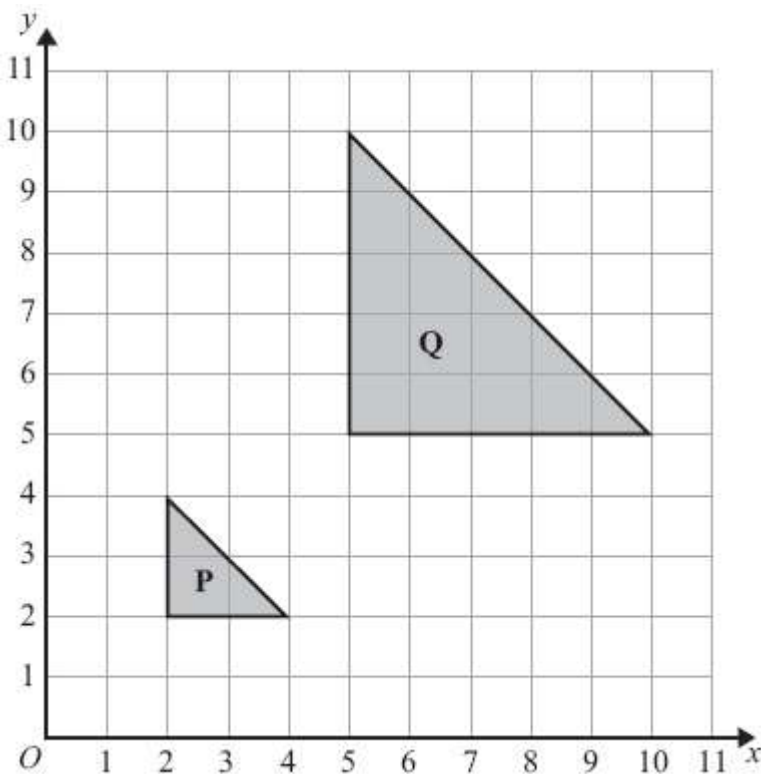
**Q5.**



Describe fully the single transformation that maps shape **P** onto shape **Q**.

(Total for Question is 3 marks)

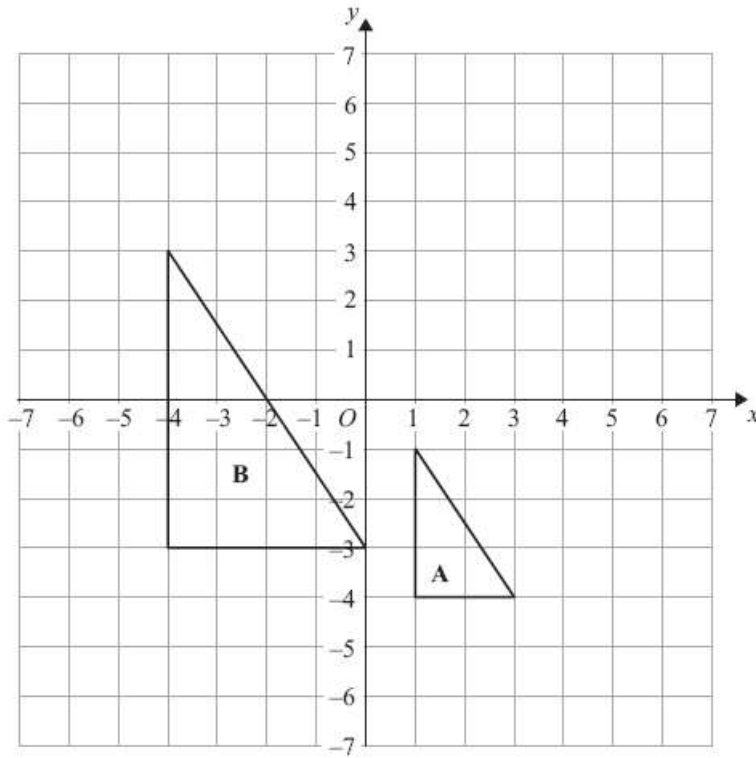
**Q6.**



Describe fully the single transformation that maps shape **P** onto shape **Q**.

(Total for Question is 3 marks)

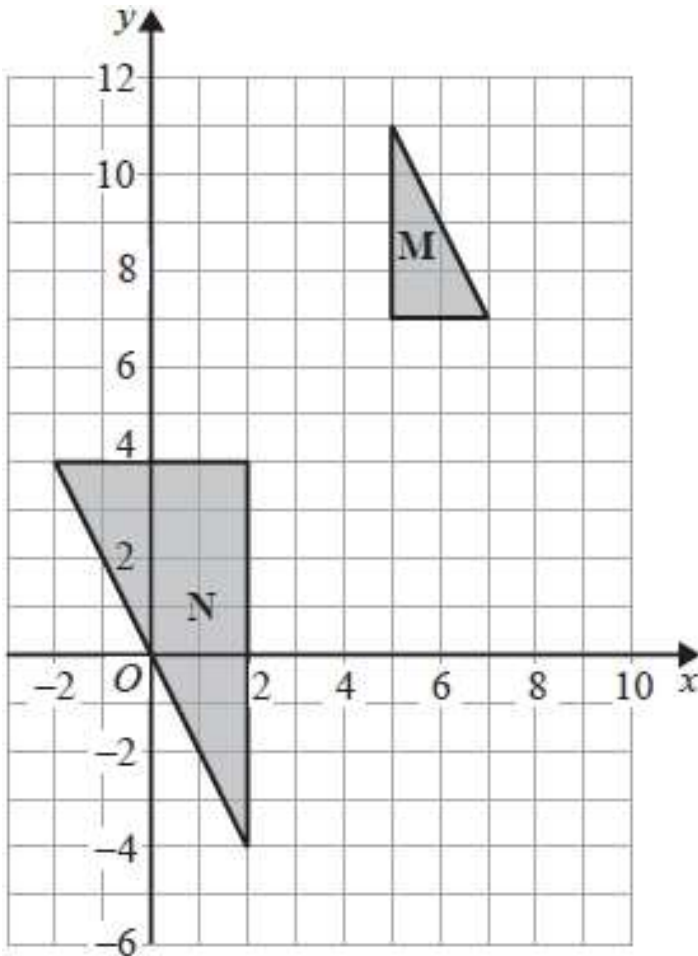
Q7.



Describe fully the single transformation that maps triangle **A** onto triangle **B**.

.....  
 .....

Q8.



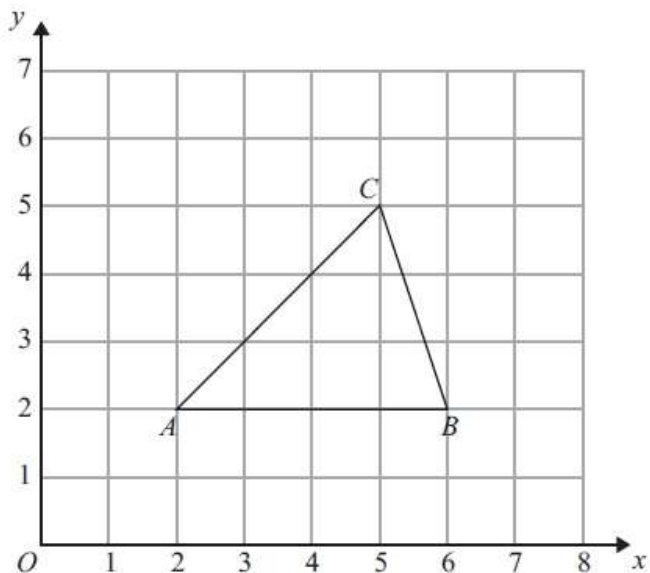
(Total for Question is 3 marks)

Describe fully the single transformation that maps triangle **M** onto triangle **N**.

.....  
 .....

(Total for question = 2 marks)

**Q9.**



Triangle *ABC* is drawn on a centimetre grid.

*A* is the point (2, 2).

*B* is the point (6, 2).

*C* is the point (5, 5).

Triangle *PQR* is an enlargement of triangle *ABC* with scale factor  $\frac{1}{2}$  and centre (0, 0).

Work out the area of triangle *PQR*.

..... cm<sup>2</sup>

(Total for Question is 3 marks)

**Q10.**

Fred is making two rectangular flower beds.

The dimensions of the larger rectangle will be three times the dimensions of the smaller rectangle.

There is going to be the same depth of soil in each flower bed.

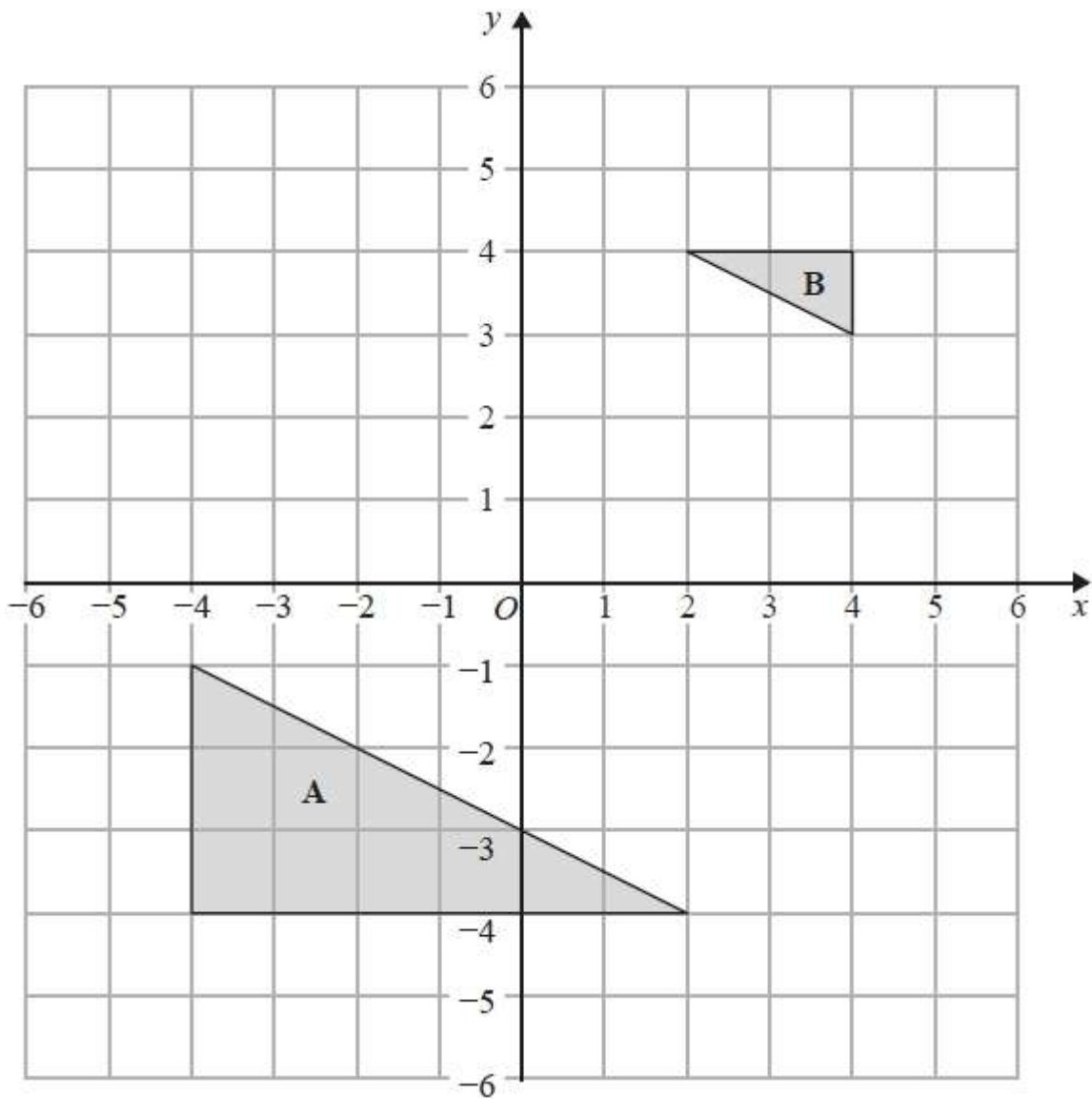
Fred needs 180 kg of soil for the smaller flower bed.

Work out how much soil Fred needs for the larger flower bed.

..... kg

(Total for question = 2 marks)

Q11.



Describe fully the single transformation that maps triangle **A** onto triangle **B**.

.....  
(Total for question = 2 marks)