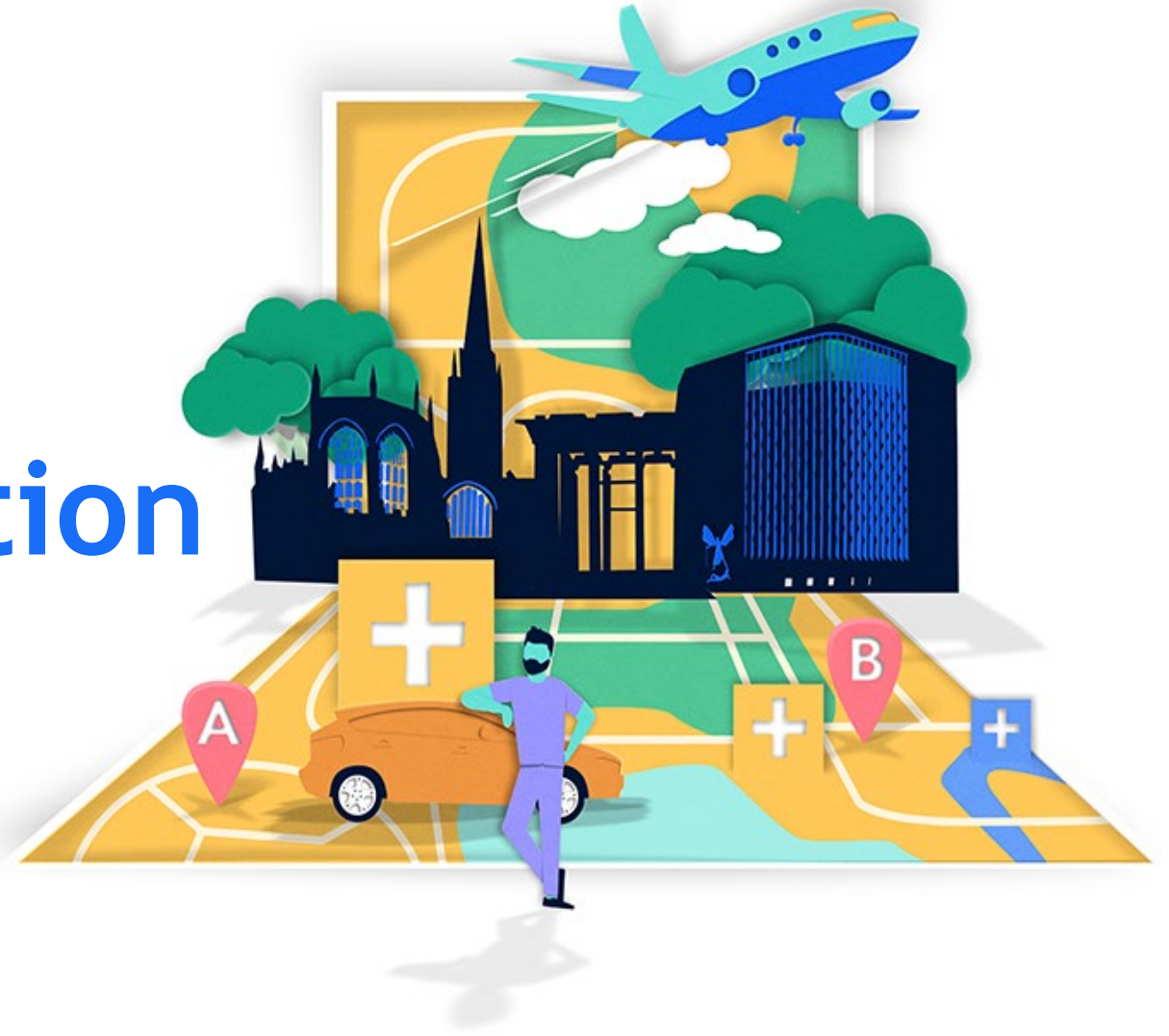


Year 5

Direction and position

The search for Lady Godiva



The search for Lady Godiva

You've arranged to meet your friends Mohammad and Megan at the Lady Godiva statue in Coventry.

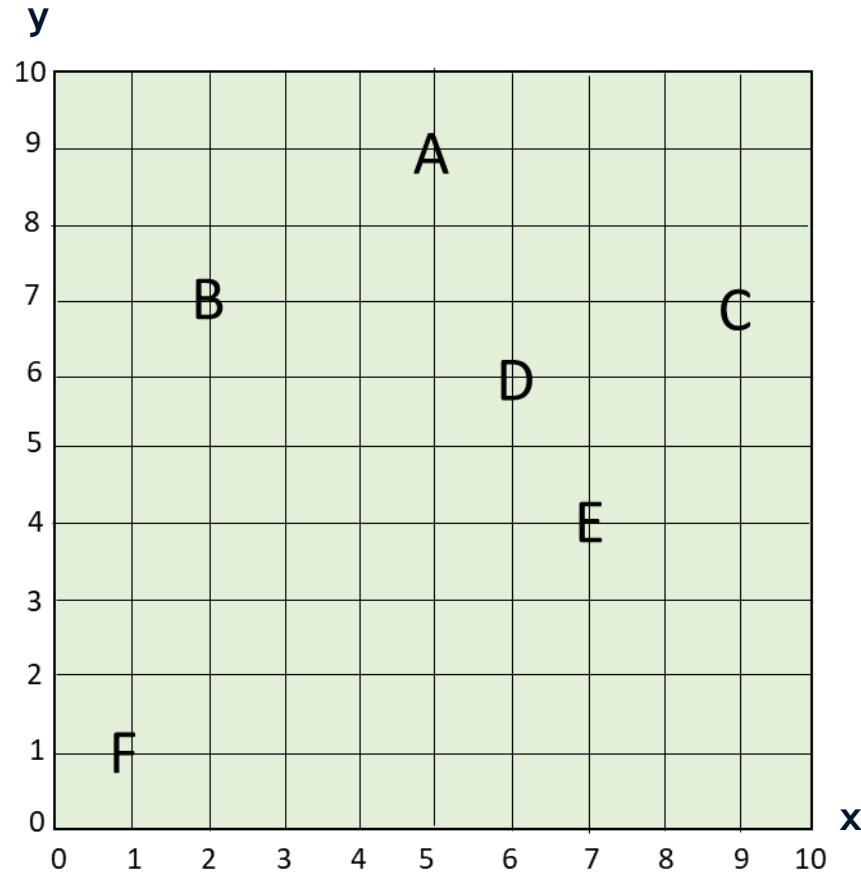
Mohammad has found his way to the statue, but you and Megan have become lost at different locations in Coventry. Megan rings you and says if we can find our way to Coventry Building Society then my Mum, the branch manager, will give us directions to the Lady Godiva statue. You have a map, but you don't know your location on it.

Can you find your friends?



Task 1: Finding your location

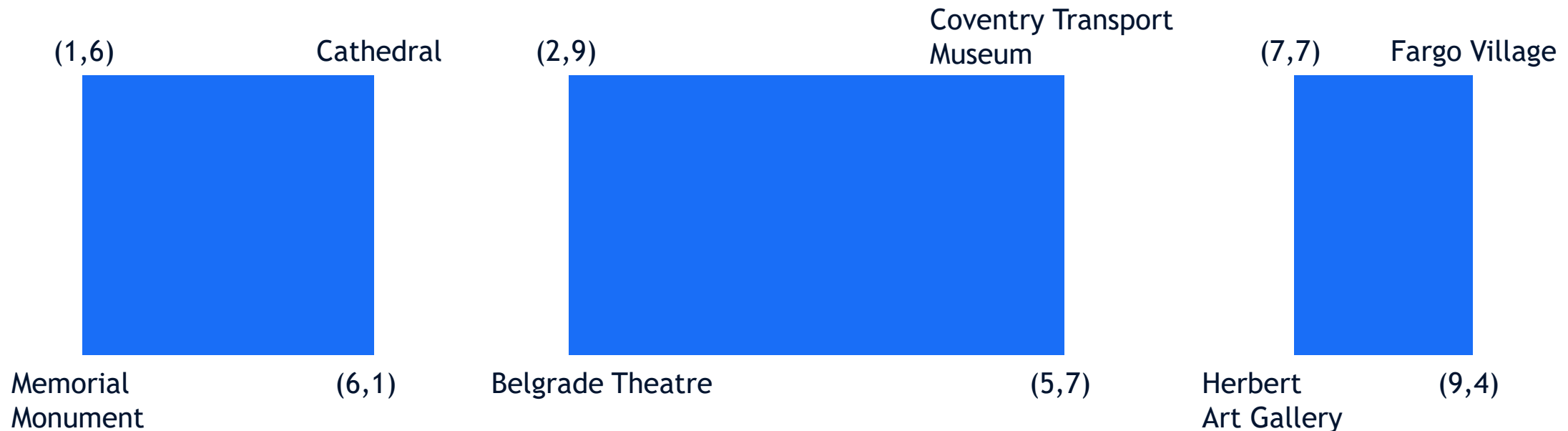
On your map of Coventry, letters represent 6 different landmarks but you don't know which landmarks they are. Firstly, write down the coordinates for each letter on your worksheet.



Task 1: Finding your location

Below are 3 shapes whose vertices correspond to points on the map. The coordinates of some vertices are displayed, while other vertices show the locations of the 6 landmarks in Coventry.

Use your knowledge of the shapes to work out which landmark corresponds with which letter on your map.



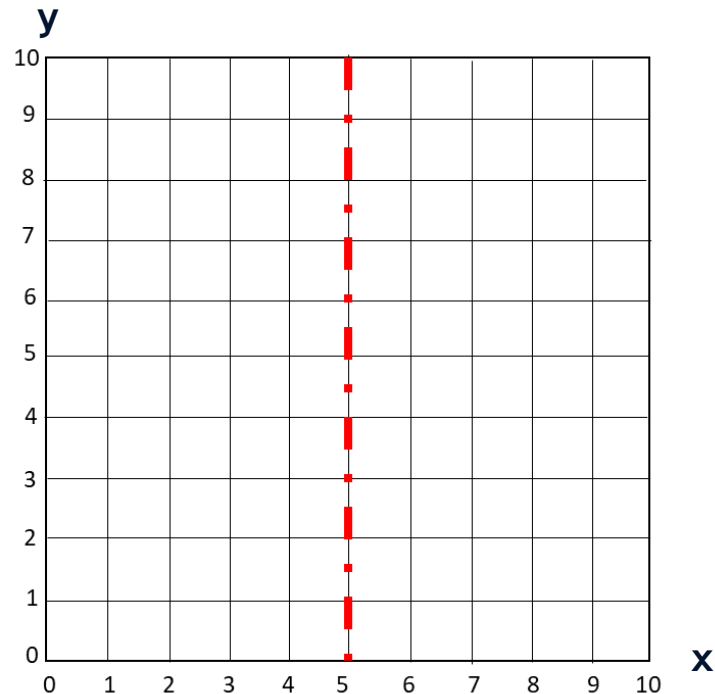
You're at the Memorial Monument, plot your location on your map.

Task 2: Your friend's location

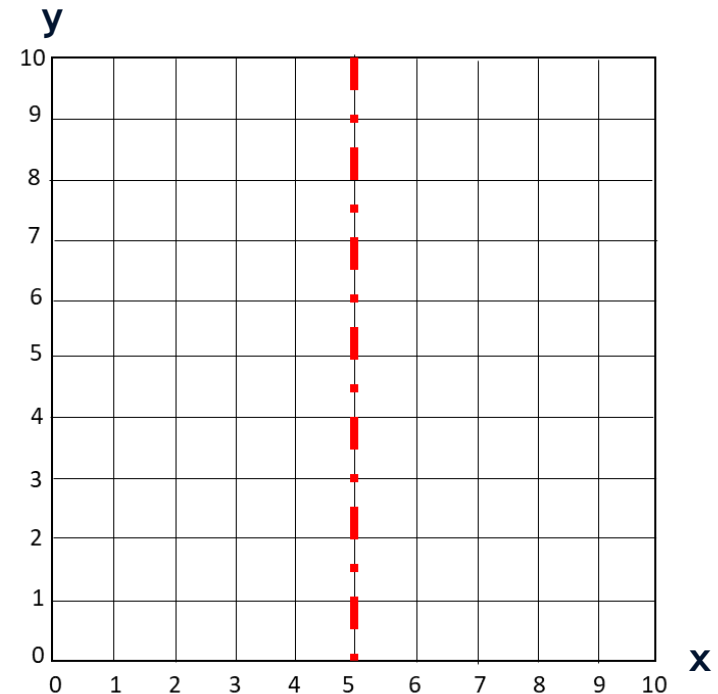
Your friend Megan's location can be found by solving the following problems.

Write down the (x,y) coordinates for the top left vertex (top vertex for the kite) of the reflected shapes. The set of coordinates that appear twice is Megan's current location on the map.

1. The coordinates of the vertices of a rectangle are $(1,1)$, $(3,1)$, $(3,4)$ and $(1,4)$. Plot the rectangle and work out the coordinates of the vertices for the rectangle reflected on the mirror line?



2. The coordinates of the vertices of a square are $(9,5)$, $(6,5)$, $(9,2)$ and $(6,2)$. Plot the square and work out the coordinates of the vertices for the square reflected on the mirror line?

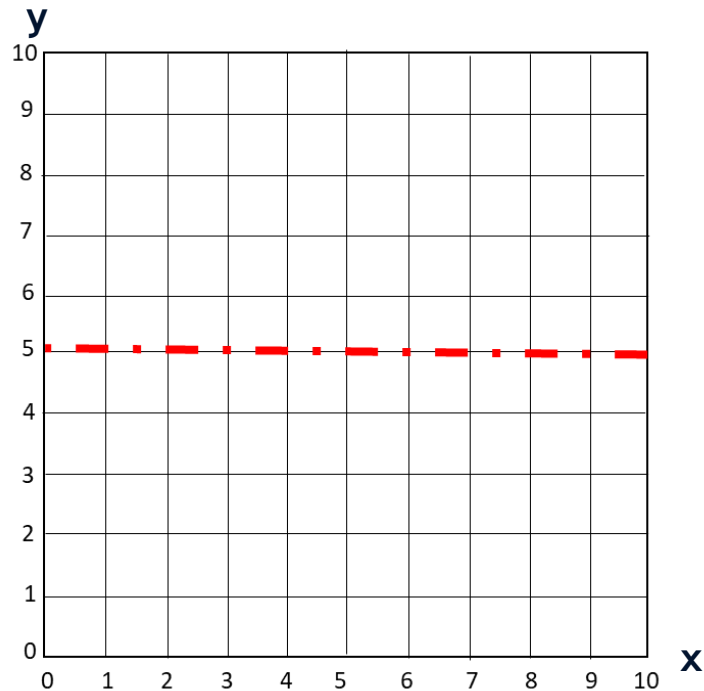


Task 2: Your friend's location

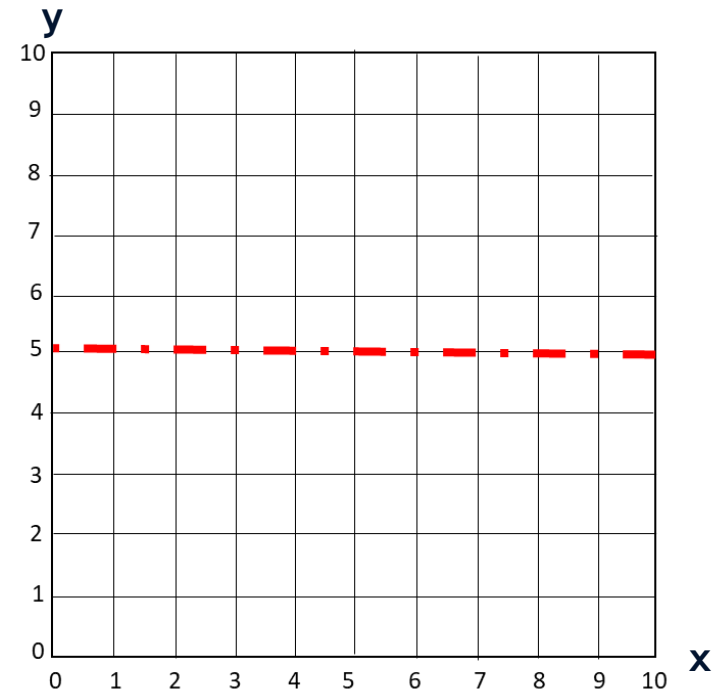
Your friend Megan's location can be found by solving the following problems.

Write down the (x,y) coordinates for the top left vertex (top vertex for the kite) of the reflected shapes. The set of coordinates that appear twice is Megan's current location on the map.

3. The coordinates of the vertices of a kite are $(3,4)$, $(2,3)$, $(3,1)$ and $(4,3)$. Plot the kite and work out the coordinates for the vertices for the kite reflected on the mirror line?

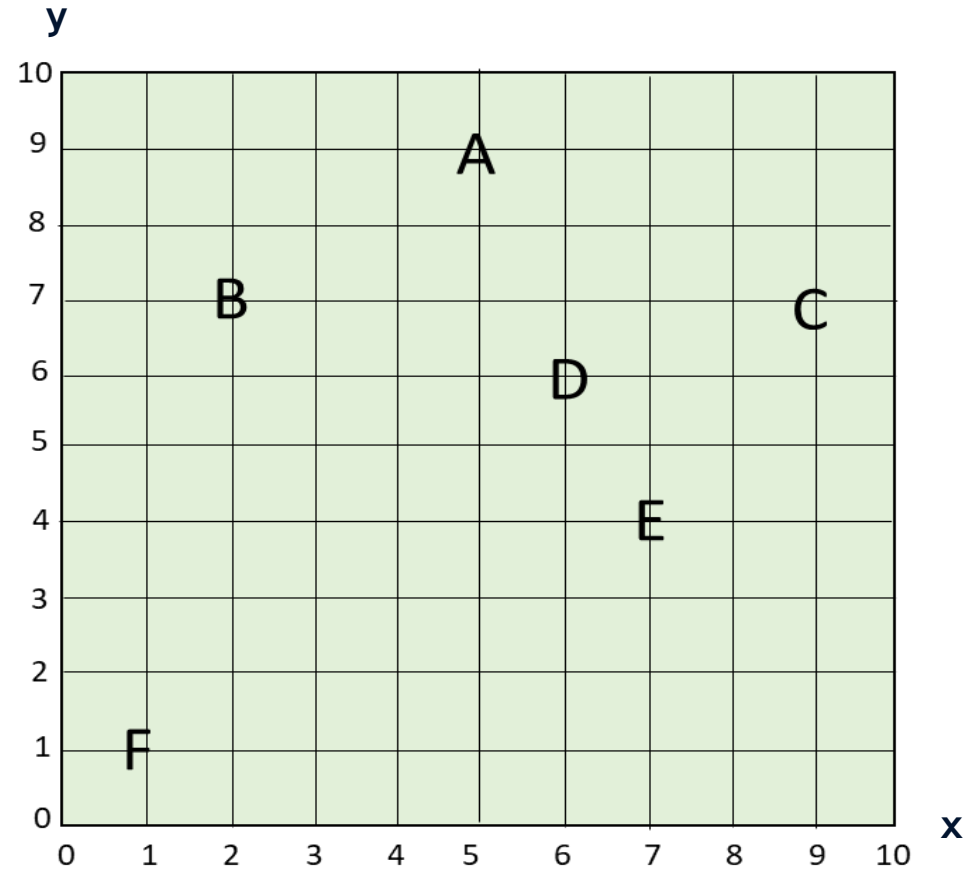


4. The coordinates of the vertices of a parallelogram are $(0,7)$, $(3,7)$, $(1,5)$ and $(4,5)$. Plot the parallelogram and work out the coordinates of the vertices for the parallelogram reflected on the mirror line?



Task 2: Your friend's location

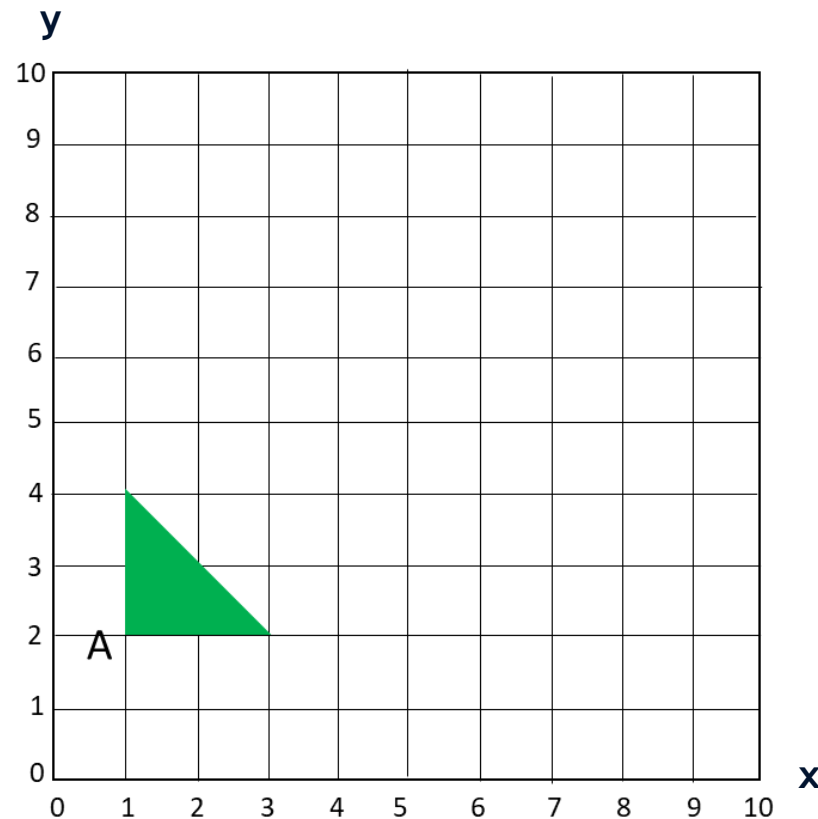
- Which (x,y) coordinates appear twice?
- This is your friend Megan's location. Map it on your map with an X.



Task 3: Journey to Coventry Building Society

To work out the route to take to get to Coventry Building Society you need to translate 3 triangles.

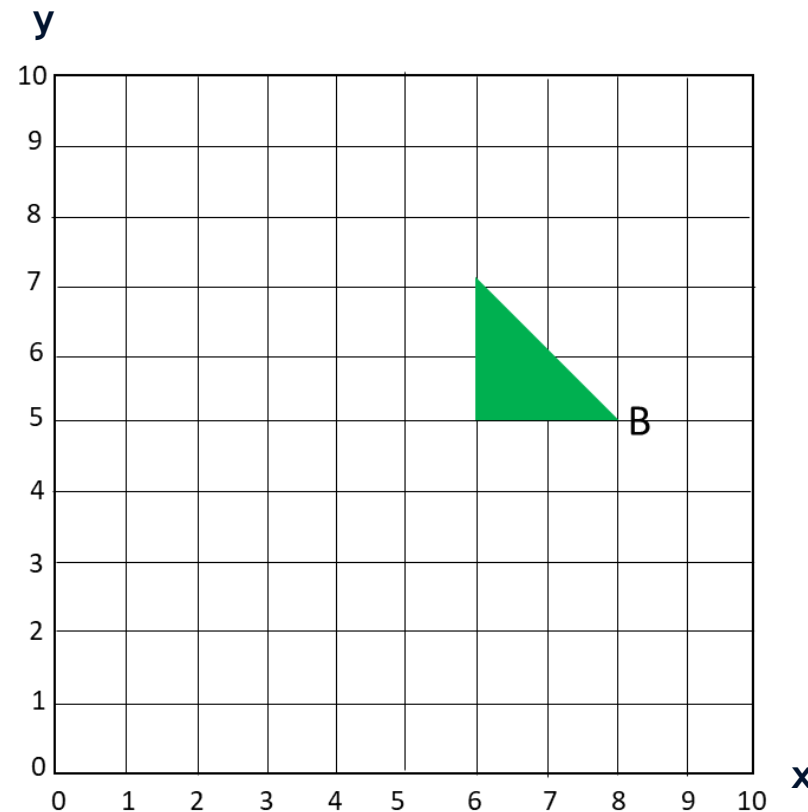
Translate the triangle so point A moves to (7,4). Draw the triangle on your work sheet, then describe the translation in the box under the grid.



Task 3: Journey to Coventry Building Society

To work out the route to take to get to Coventry Building Society you need to translate 3 triangles.

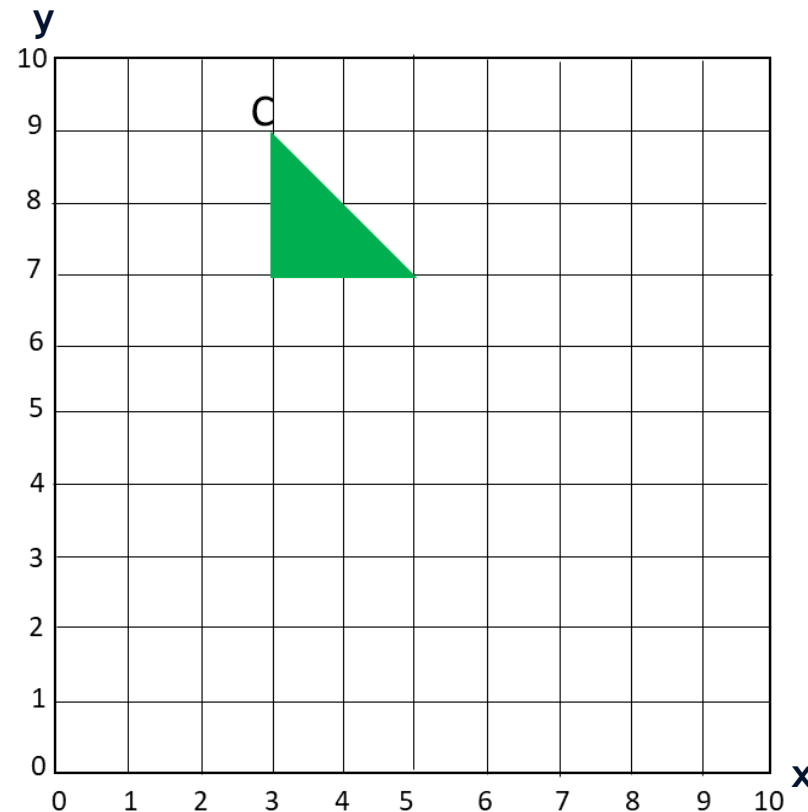
Translate the triangle so point B moves to (7,8). Draw the triangle on your work sheet, then describe the translation in the box under the grid.



Task 3: Journey to Coventry Building Society

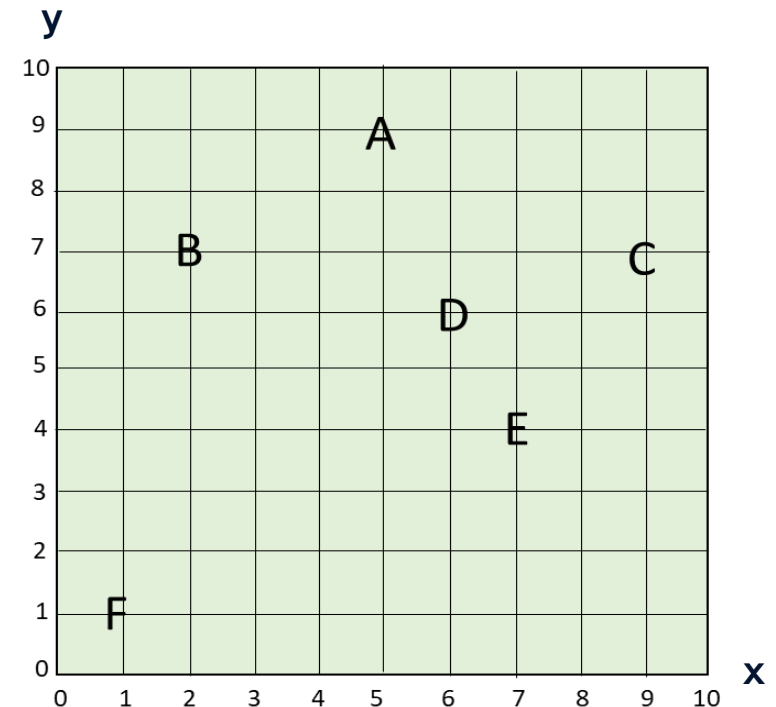
To work out the route to take to get to Coventry Building Society you need to translate 3 triangles.

Translate the triangle so point C moves to (1,8). Draw the triangle on your work sheet, then describe the translation in the box under the grid.



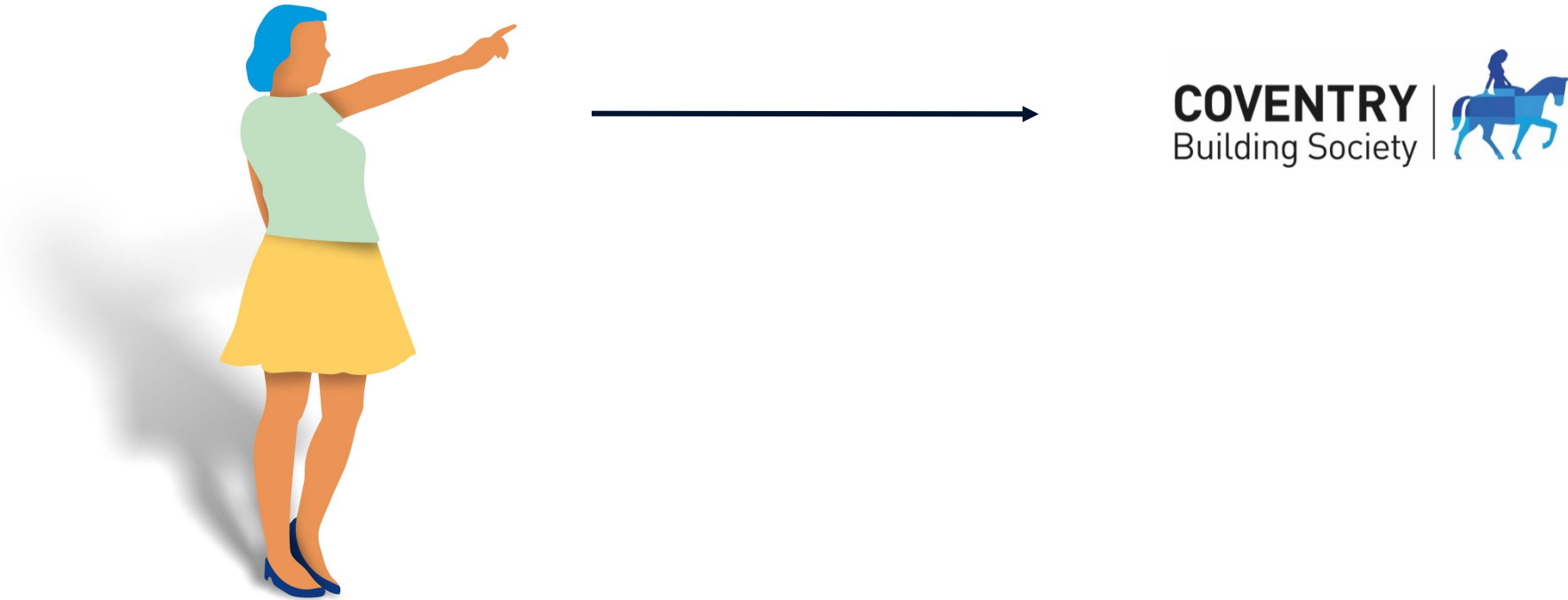
Task 3: Journey to Coventry Building Society

- The route to Coventry Building Society is given by the translations you have just described.
- Follow the translations in order to get to Coventry Building Society and mark the coordinates on your map with a X.
- What are the coordinates of Coventry Building Society?



Task 4: Direct your friend to Coventry Building Society

Describe the translation of your friend's location to Coventry Building Society.



Task 5: Where is Lady Godiva?

Megan's Mum, the branch manager at Coventry Building Society, tells you that the statue is **1 unit to the left** and **2 units down**.

COVENTRY
Building Society



What are the coordinates for the Lady Godiva statue?

Did you find
Lady Godiva?

