

Year 6

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.

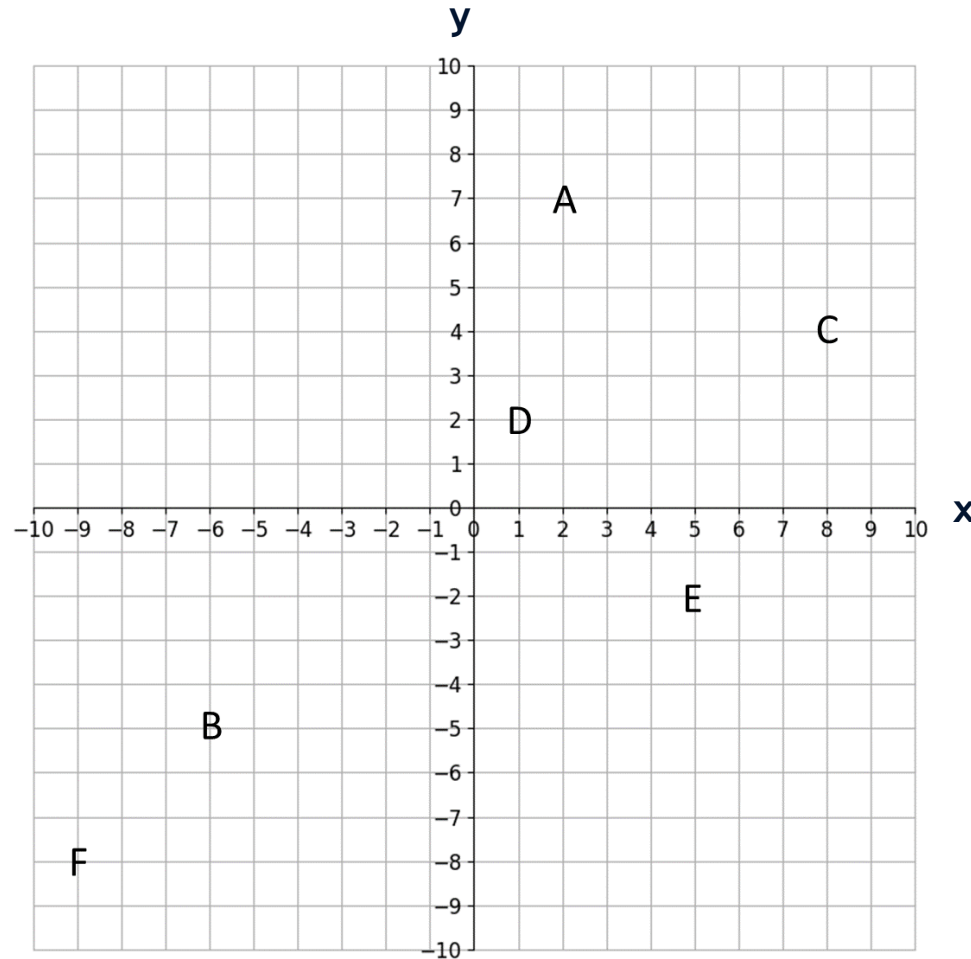
Mohammad has found his way to the statue, but you and Megan have become lost at different locations in Coventry. Megan rings you and says if we can find our way to Coventry Building Society then my Mum, the branch manager, will give us directions to the Lady Godiva statue. You have a map, but you don't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

Can you find your friends?



Task 1: Finding your location

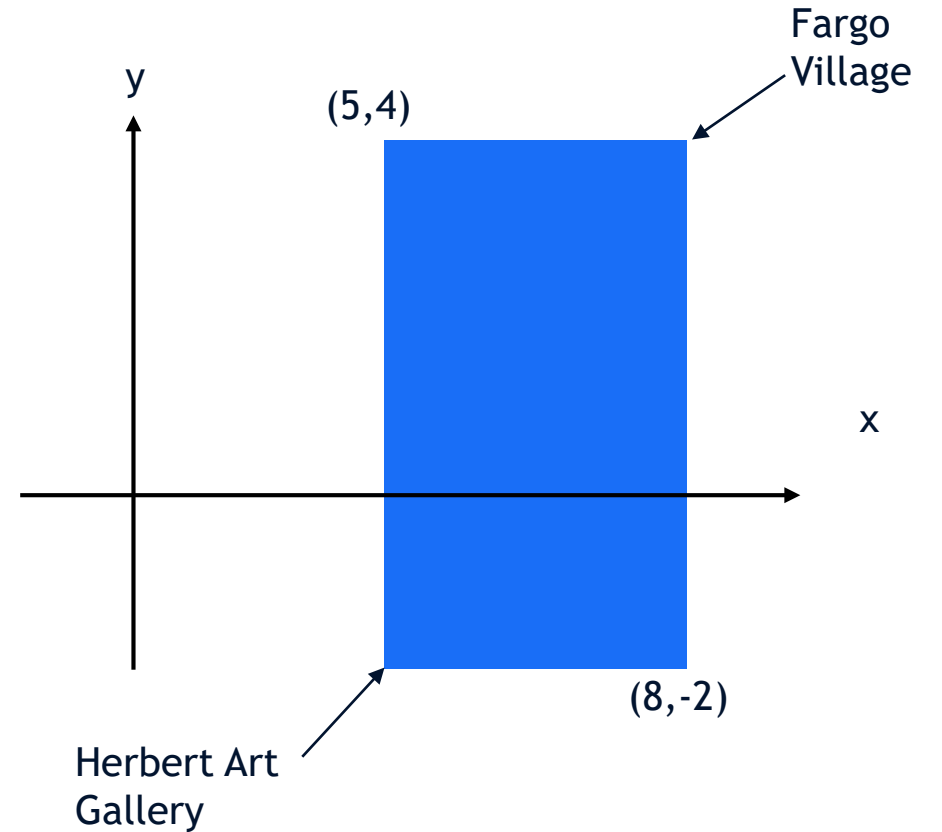
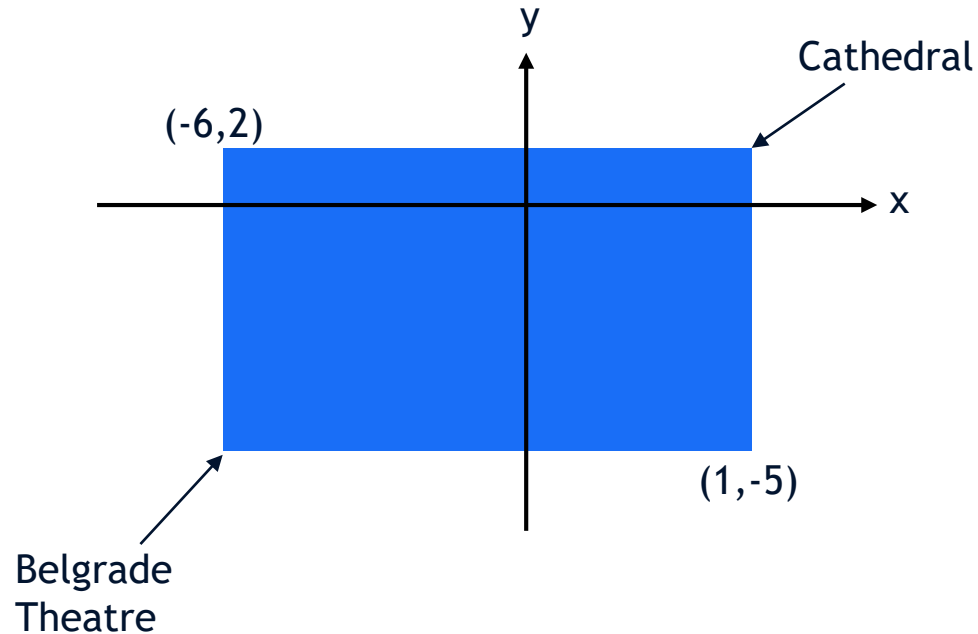
On your map of Coventry, letters represent 6 different landmarks but you don't know which landmarks they are. Firstly, write down the coordinates for each letter on your worksheet.



Task 1: Finding your location

Shown below are 2 shapes whose vertices correspond to points on the map. The coordinates of some vertices are displayed, while other vertices show the locations of 4 out of the 6 landmarks on your Coventry map.

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

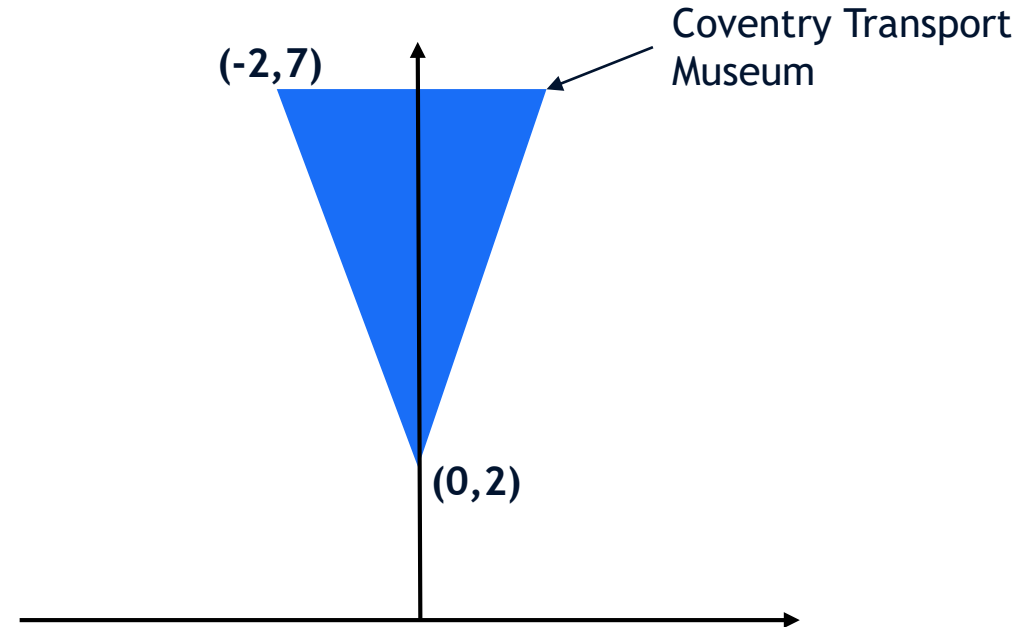
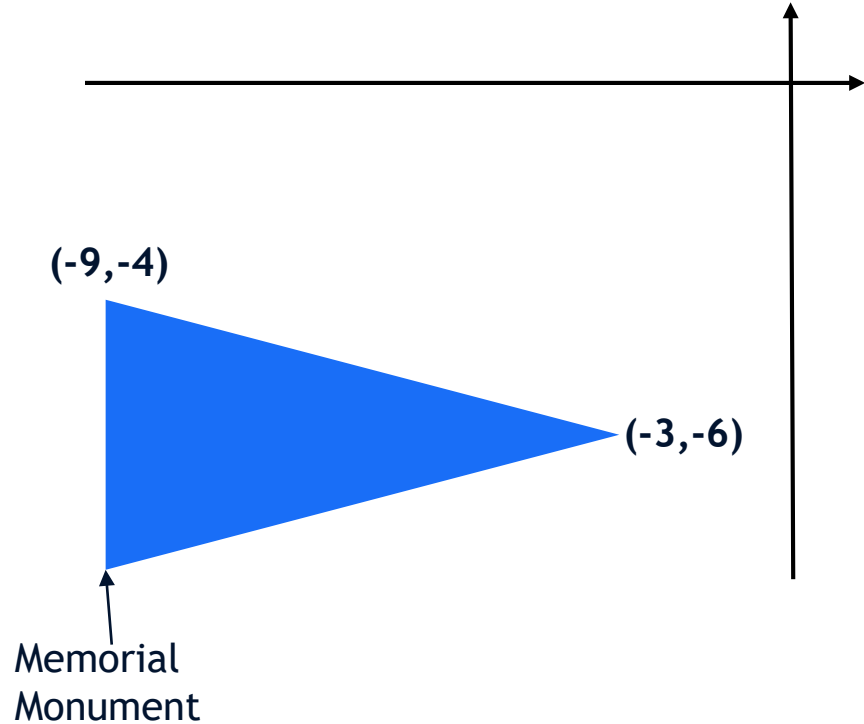


You're at the Memorial Monument, plot your location on your map.

Task 1: Finding your location

Shown below are 2 shapes whose vertices correspond to points on the map. The coordinates of some vertices are displayed, while other vertices show the remaining 2 locations for the landmarks on your Coventry map.

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



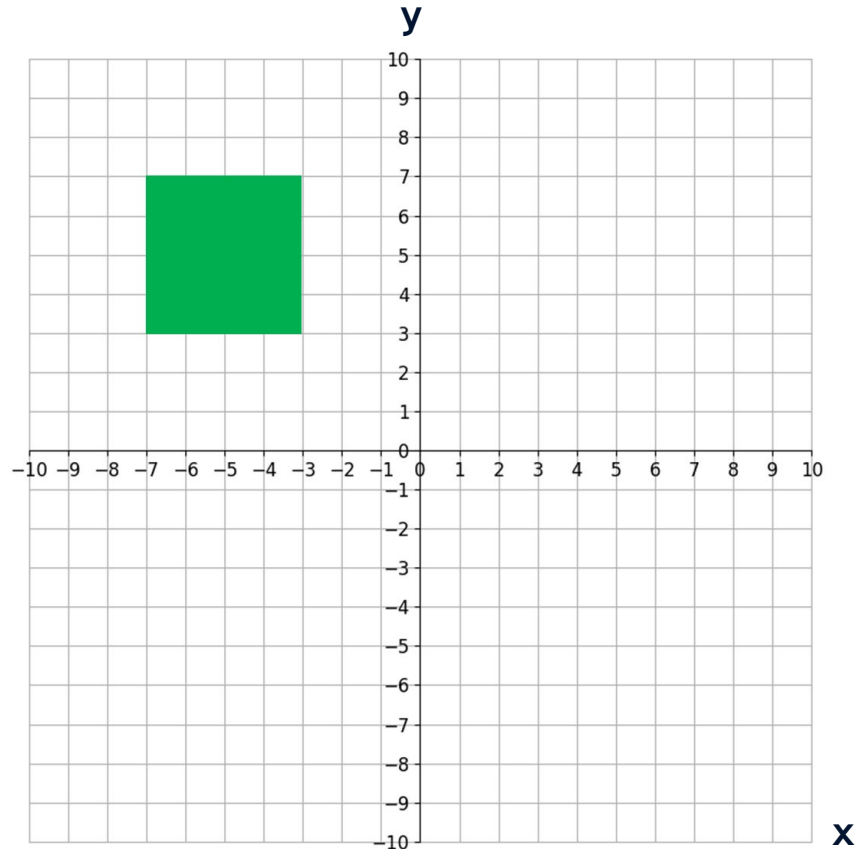
You're at the Memorial Monument, plot your location on your map.

Task 2: Your friend's location

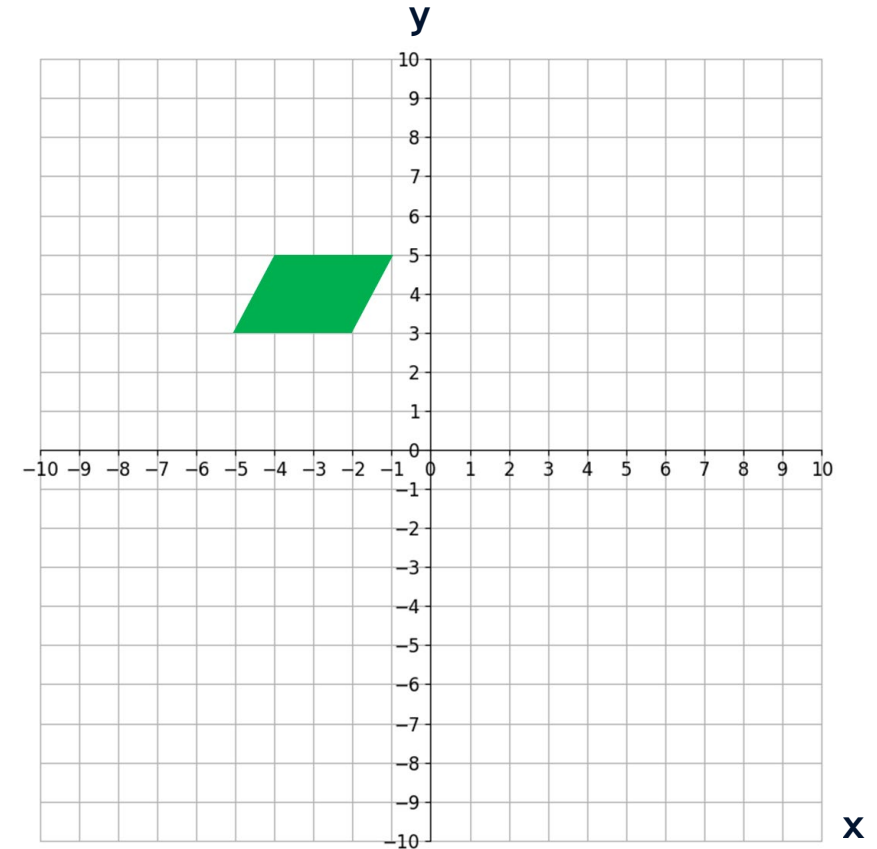
Your friend Megan's location can be found by solving the following problems.

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

1. Reflect this square on the x -axis.



2. Reflect this parallelogram on y -axis.

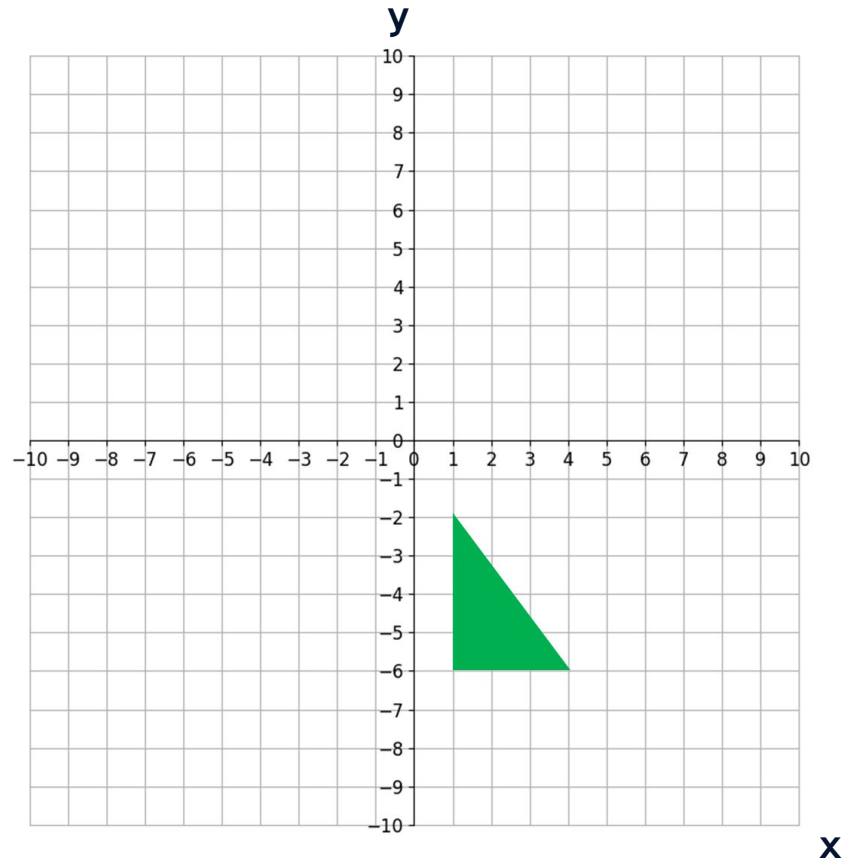


Task 2: Your friend's location

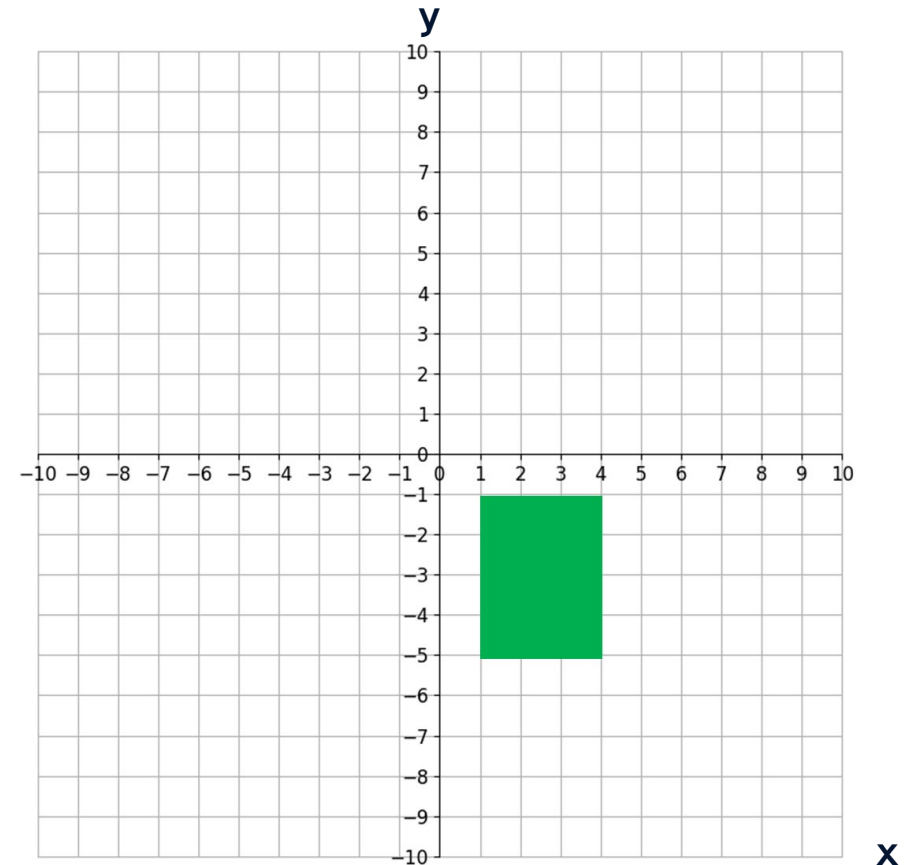
Your friend Megan's location can be found by solving the following problems.

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

3. Reflect this triangle on the y -axis

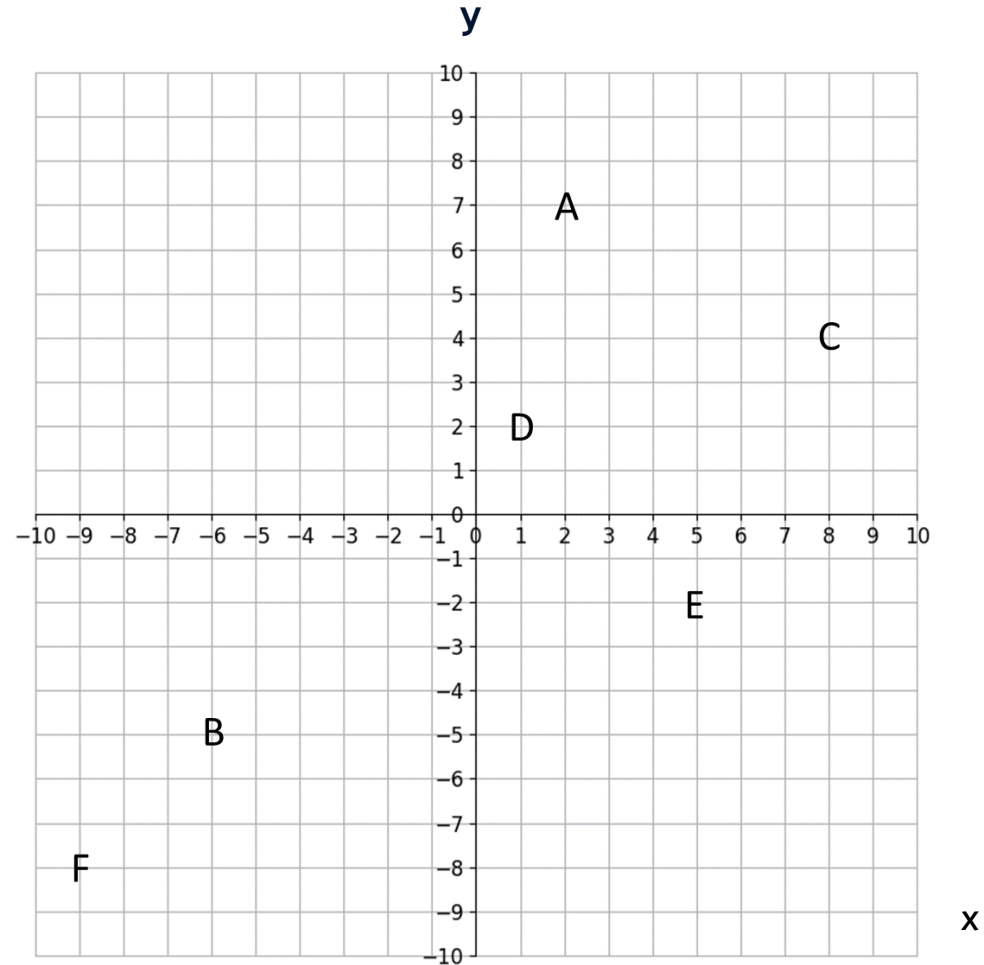
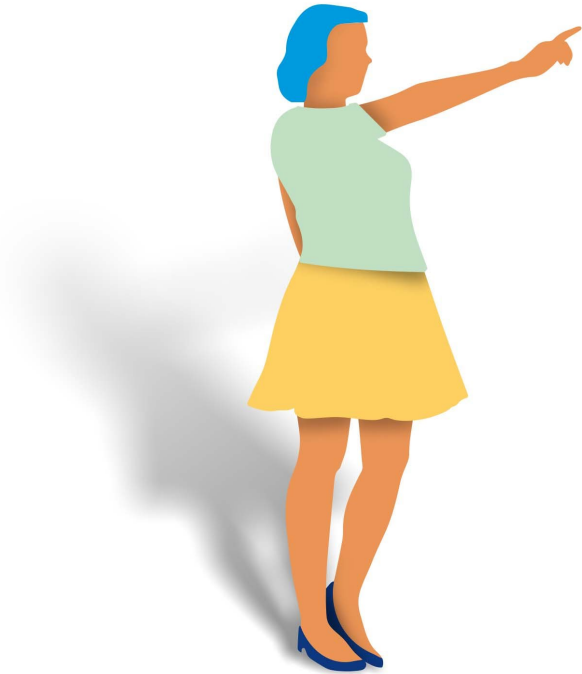


4. Reflect this rectangle on x -axis.



Task 2: Your friend's location

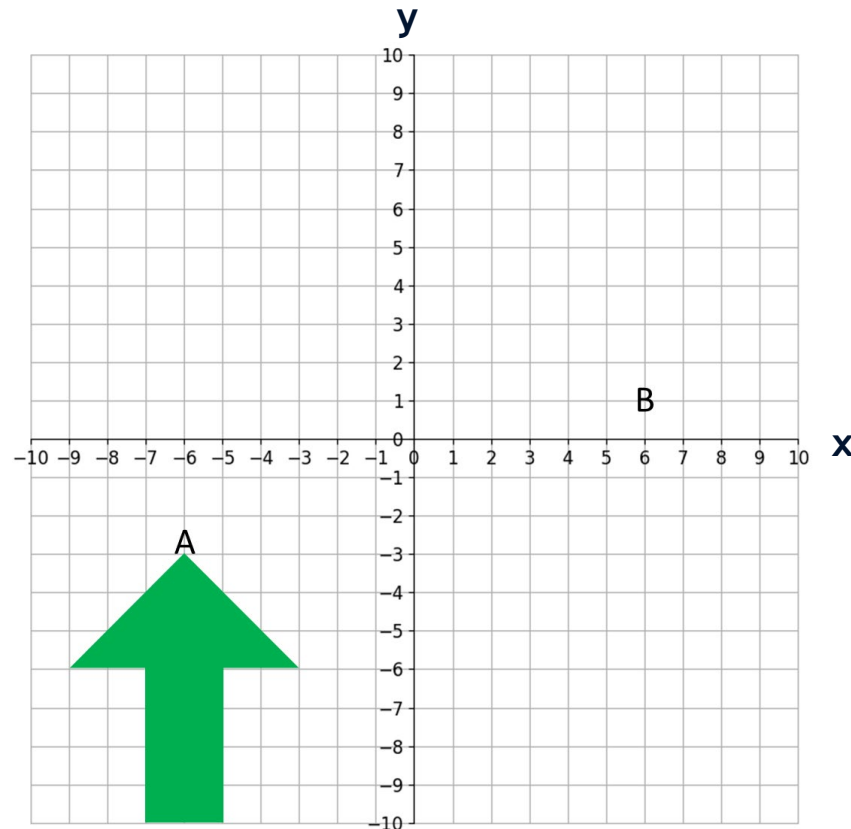
- Which (x,y) coordinates appear twice?
- This is your friend Megan's location. Map it on your map with an X.



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.

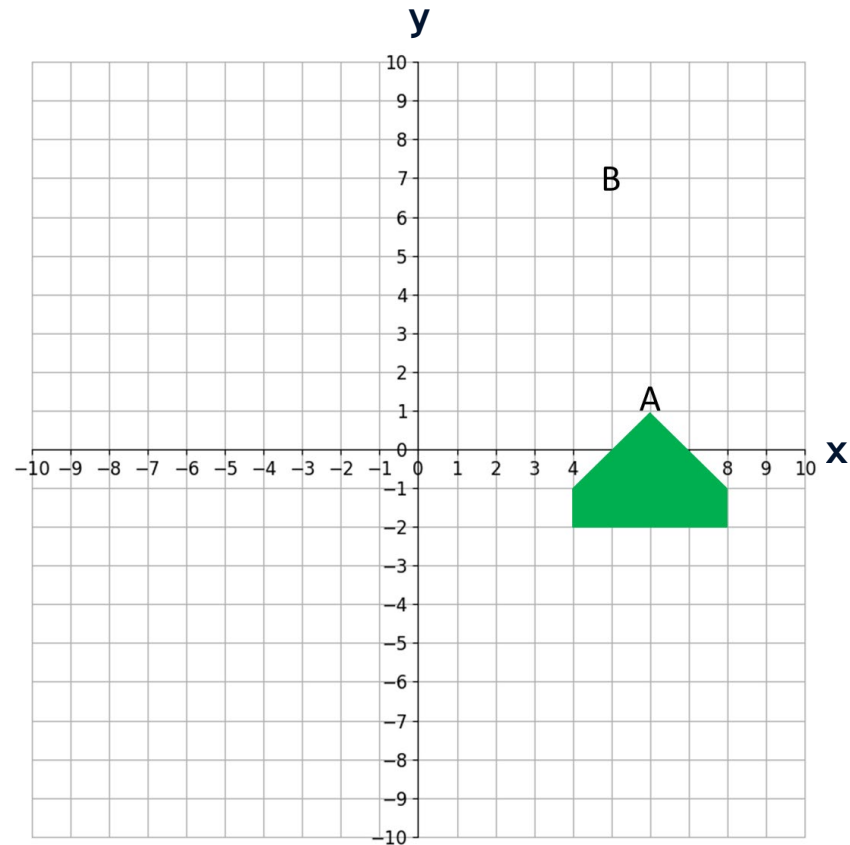
Translate this shape so point A moves to point B. Draw the shape on your work sheet, then describe the translation in the table.



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.

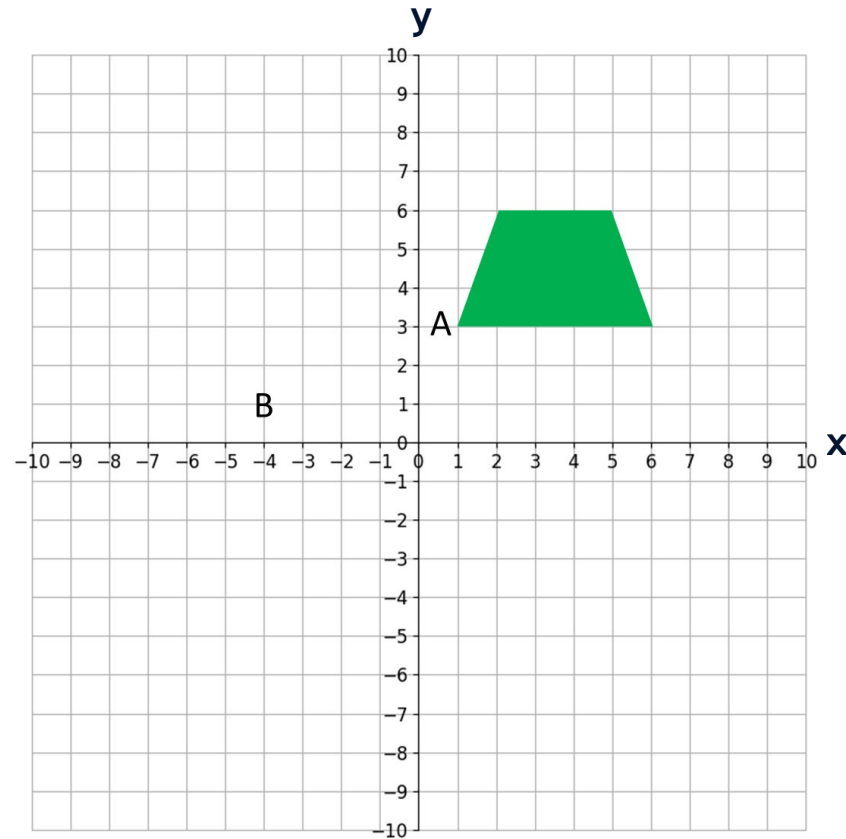
Translate this shape so point A moves to point B. Draw the shape on your work sheet, then describe the translation in the table.



Task 3: Journey to Coventry Building Society

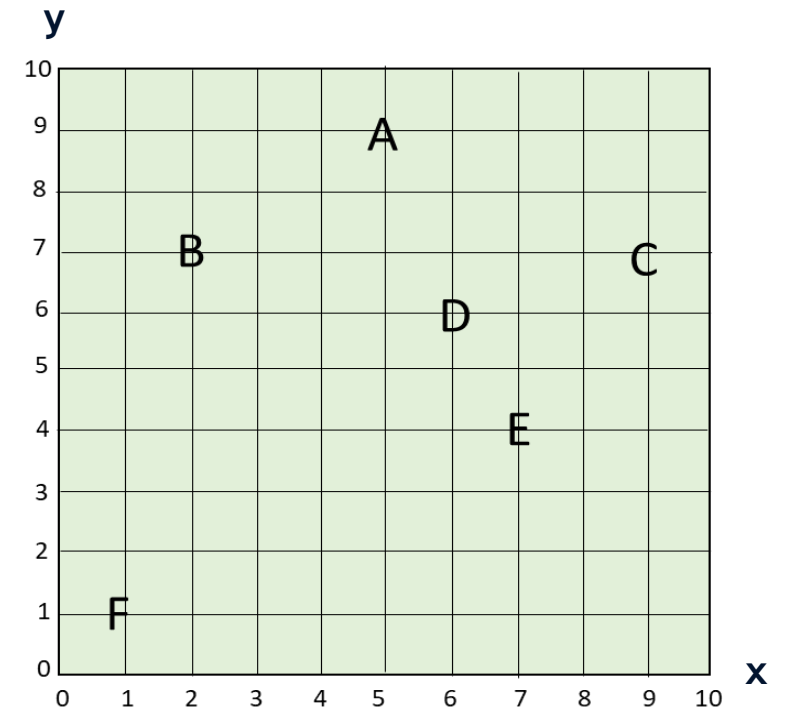
To work out the route to take to get to Coventry Building Society you need to translate 3 triangles.

Translate this shape so point A moves to point B. Draw the shape on your work sheet, then describe the translation in the table.



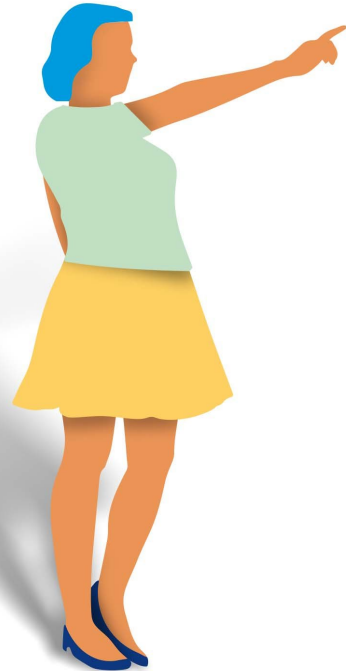
Task 3: Journey to Coventry Building Society

- 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 **2 units to the left** and **3 units down**.



What are the coordinates for the Lady Godiva statue?

Did you find Lady Godiva?

