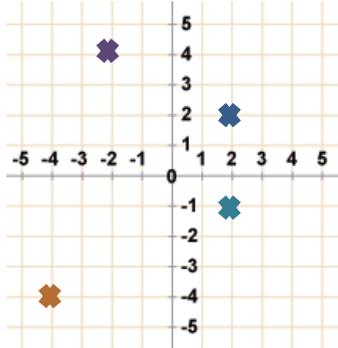
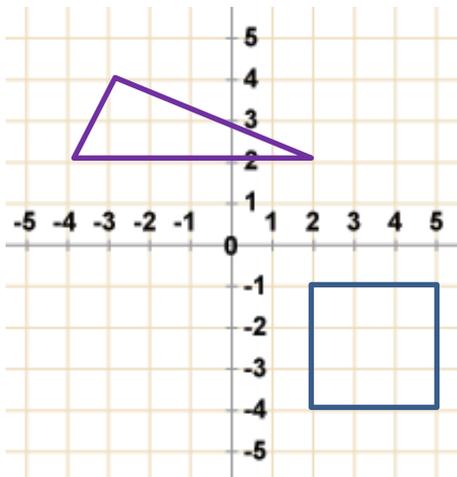


Describe positions on the full coordinate grid (all four quadrants).

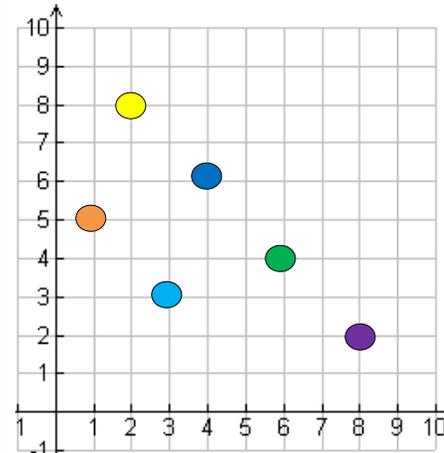
- Describe the position of the crosses marked on the grid.



- Write down the co-ordinates of the vertices of the shapes below.



- Beth draws a map of her town.



- Key:
- | | |
|--|---|
| ● My house | ● School |
| ● Shop | ● Cinema |
| ● Park | ● Ice rink |

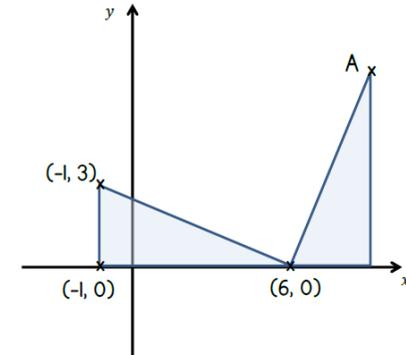
What is at these co-ordinates?
a) (3,3) b) (6,4)

Write down the co-ordinates of these places.
a) School b) My house

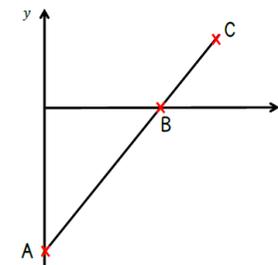
Tom and Keira look at Beth's map.
Tom says 'The cinema is at (8,2)
Keira says 'No, the park is at (8,2)

Who is wrong? Why does their mistake matter?

- The diagram shows two identical triangles. The co-ordinates of three points are shown. Find the co-ordinates of point A.

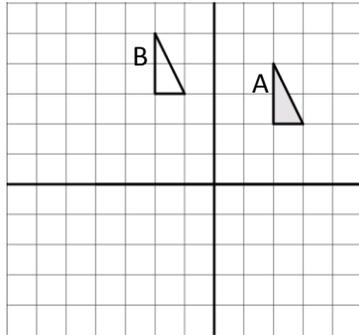


- A is the point (0, -10)
B is the point (8, 0)
The distance from A to B is two thirds of the distance from A to C.
Find the coordinates of C.

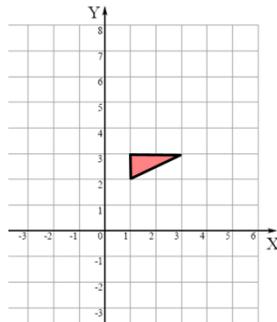


Draw and translate simple shapes on the coordinate plane, and reflect them in the axes.

- Describe the single translation that takes A to B.



- Reflect the triangle in the y axis.



Hannah translates the triangle 2 squares to the right and 5 squares down.

Find the new coordinates of the triangle.

- Two squares have the following co-ordinates:
Square A: (3, 5) (7, 5) (3, 9) (7, 9)
Square B: (1, 1) (5, 1) (1, 5) (5, 5)

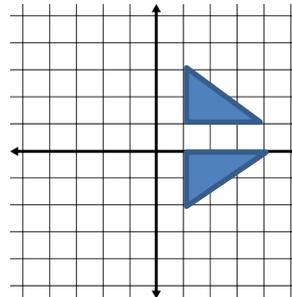
Describe the translation of square A to B and then from B to A.

- Always, sometimes, never.**

When a shape is reflected in the y axis, the y co-ordinates never change.

When a shape is reflected in the x axis, the x co-ordinates never change.

- Phil has completed the reflection in the x axis



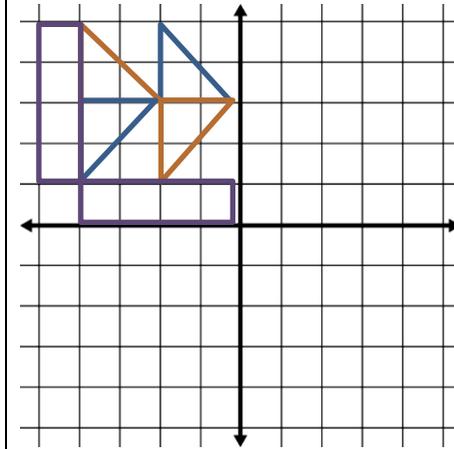
Is Phil correct?

Convince me.

- Max is designing a pattern.

Copy the diagram and reflect the pattern in the y axis.

Now reflect the whole pattern in the x axis.



- Describe two transformations that map rectangle A onto rectangle B.

