



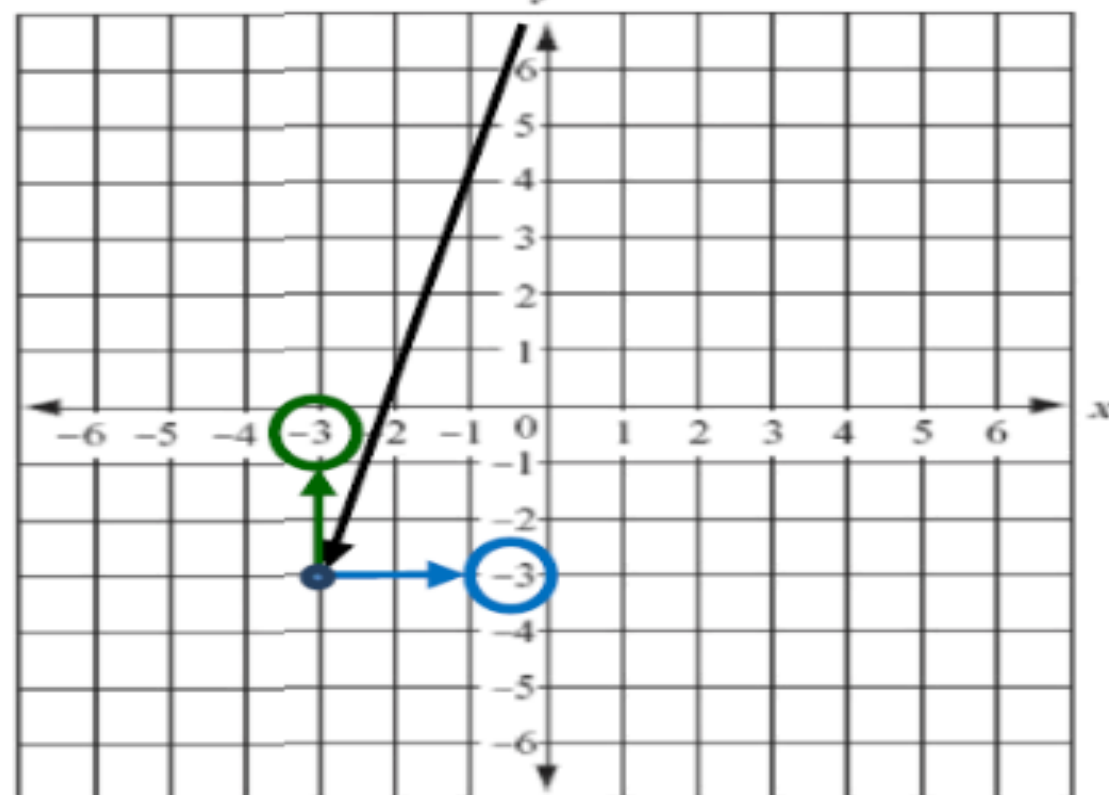
L.O. Describe positions on a full coordinate grid.

What does a full coordinate grid look like?

How does it work?

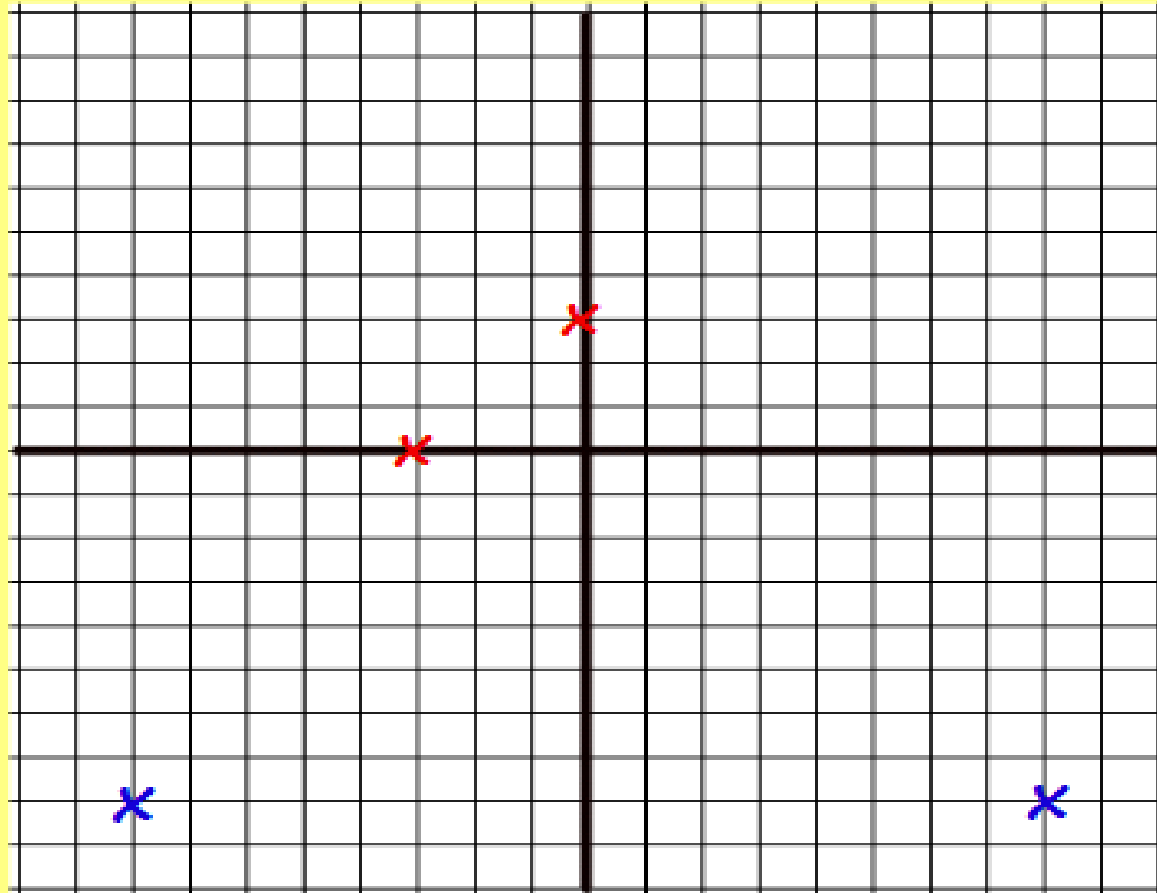
- Coordinates are written in this way (,) where numbers are either side of the comma.
- The first number is the x value and is found by imagining a vertical line from the point to where it meets the x -axis. (-3,)
- The second number is the y value and is found by imagining a horizontal line from the point to where it meets the y -axis. (-3, -3)

This is the
position being
described



Point B is at (-3, -3)

L.O. Describe positions on a full coordinate grid.



What are the coordinates of the other vertices of the squares?

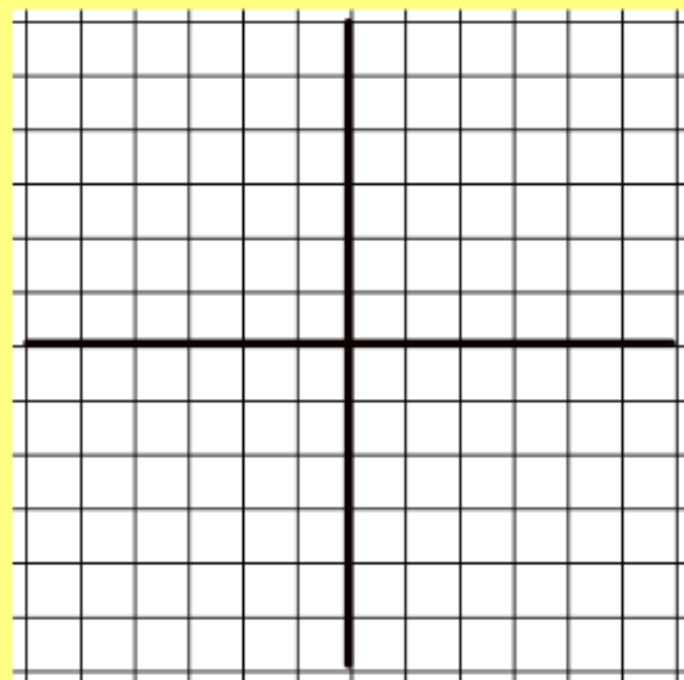
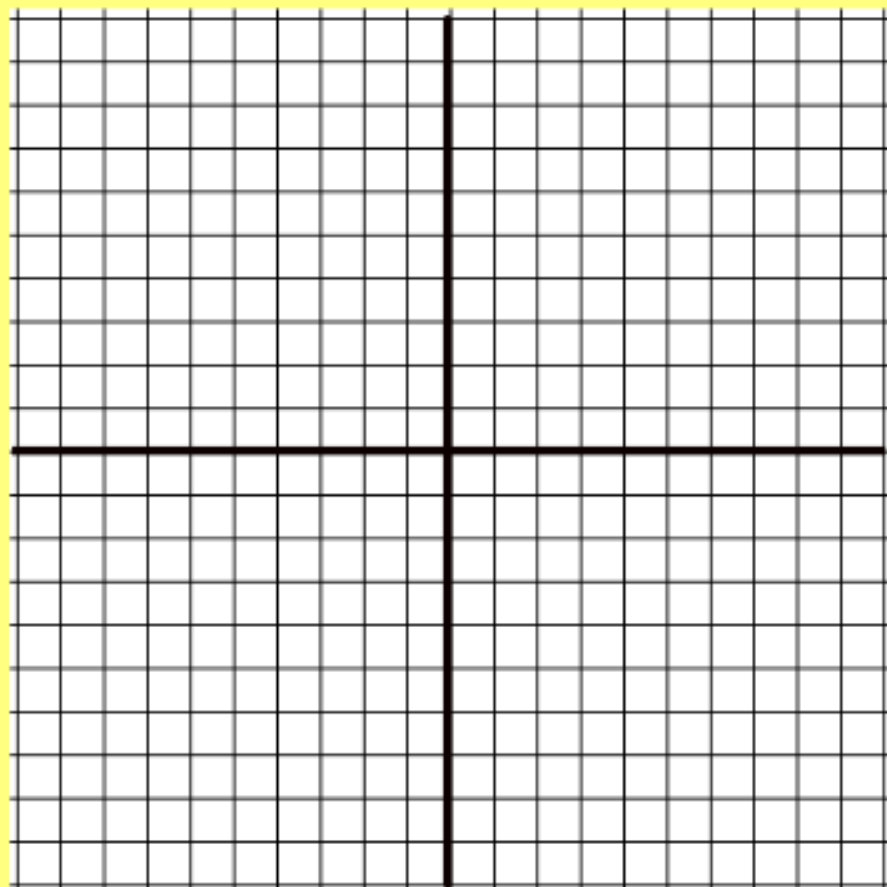
L.O. Describe positions on a full coordinate grid

The coordinates of two vertices of a square are $(-2, -3)$ and $(4, 3)$.

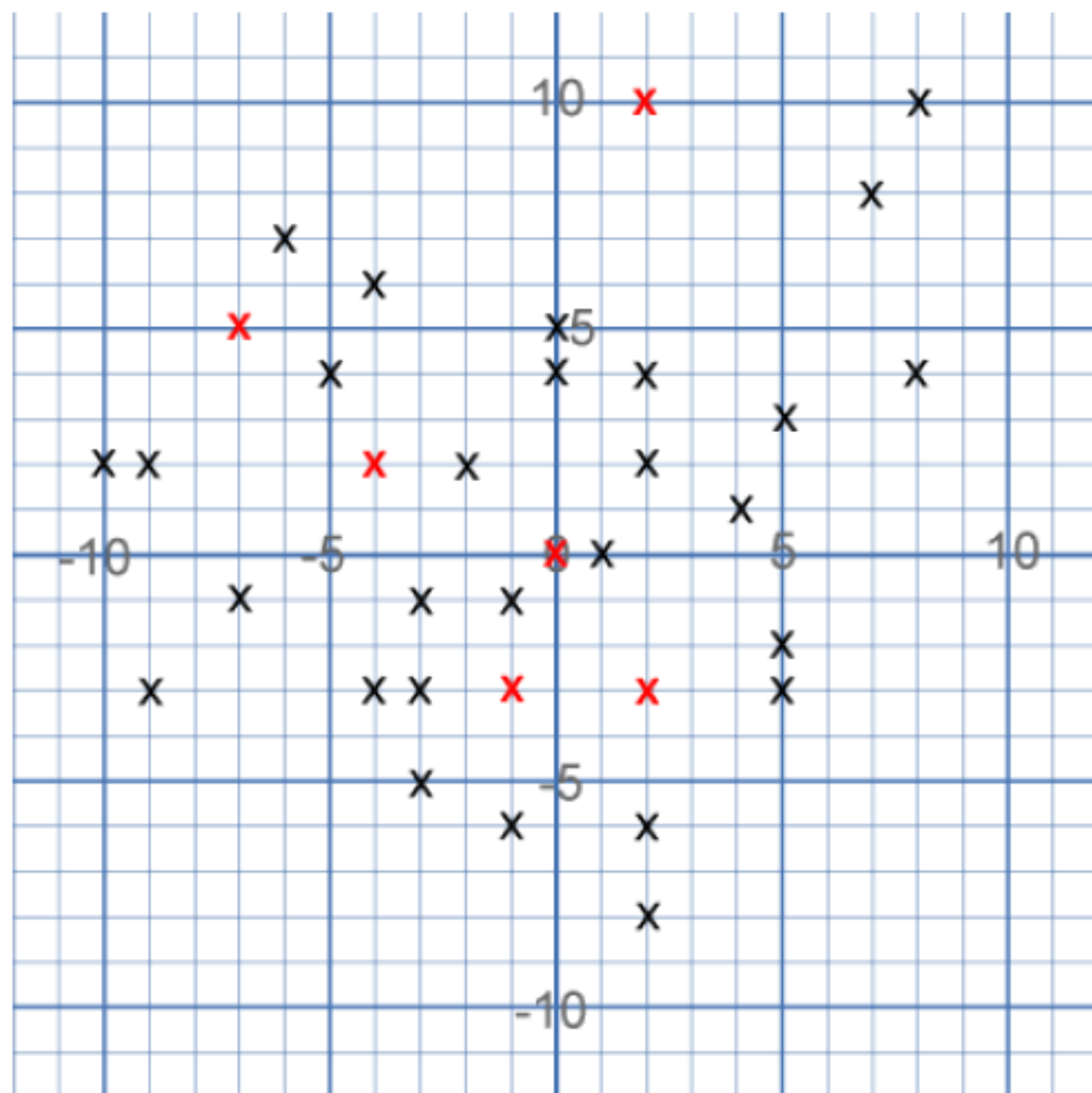
Investigate the possible coordinates of the other two vertices. Try to find all of them.

On a coordinate grid plot these three points: $(1, 3)$ $(-2, 2)$ and $(-1, 4)$.

By adding a fourth point investigate which different geometric shapes you can make.



- On the graph below there are 34 marked points.



- These points all mark the vertices (corners) of ten hidden squares.
- Each of the 6 red points is a vertex shared by two squares.
- The other 28 points are each a vertex of just one square.
- All of the squares share at least one vertex with another square.
- All the squares are different sizes.
- There are no marked points on the sides of any square, only at the vertices. (There are two near misses!).
- Can you find the ten hidden squares?

Emma says, 'The point B has coordinates (11,5).'
Use the graph to explain why she cannot be correct.

