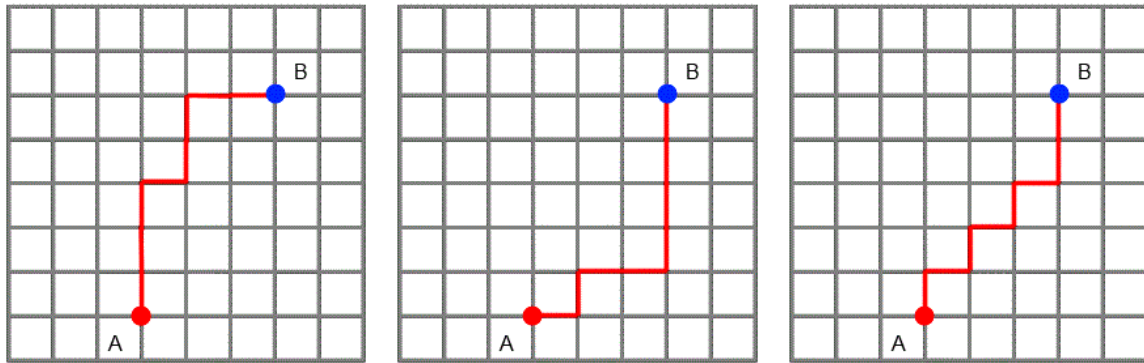


The grid below represents a city laid out in "blocks" with all the roads running north-south, or east-west.



The red line shows three ways of getting from A to B.

What interesting mathematical questions can you think of to explore on a city grid like this one?

Turn over to see some ideas of questions you might like to explore.

How many different paths are there from A to B?

If I know the coordinates of two points, can I quickly work out how far I will have to walk to get from one to the other?

Is there a quick way to find **all** the different paths from one point to another?

Is there a quick way to work out **how many** different paths there will be?

If I start at a point and only want to walk 6 blocks, how many possible places might I end up?