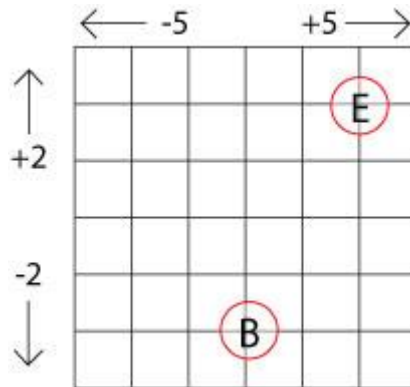


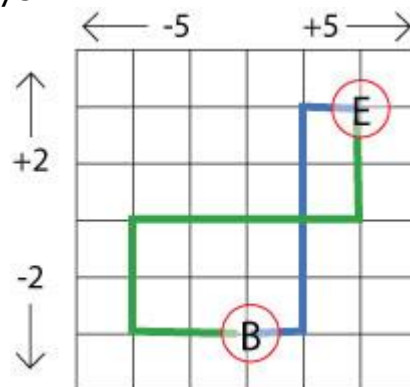
Journeys in Numberland

Tom and Ben were in Numberland in the county of Addition. They had a map which looked like this:



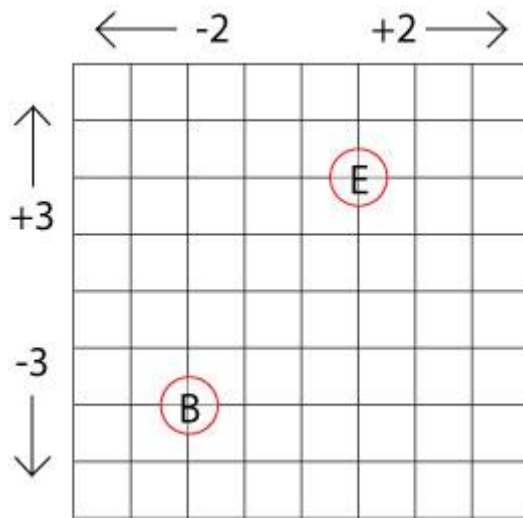
They were at point B and they began their journey with ten points. For every square they walk to the right on the map, they add five. For every square they walk to the left on the map, they take away five. If they go North (up on the map), they added two for every square, and if they go South (down on the map), they take away two for each square.

First they made these journeys:



The blue line shows Tom's journey and the green line shows Ben's. How many points did they have each when they reached E? Do you notice anything?

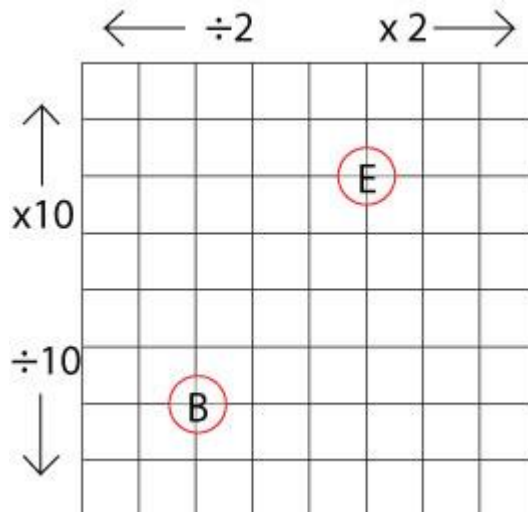
Here is a different grid for you to make up some journeys of your own, beginning at B and ending at E.



You can download and print off [this sheet](#) which has two copies of the grid map. What do you notice about your different journeys? Can you explain your observations?

After they had explored in the county of Addition in Numberland, Tom and Ben went on to the county of Multiply.

Here they had a new map which looked like this ([here are two copies](#) of the map):



They explored here too. Each time they started at B with 10 points and made their way to E. Try lots of journeys yourself.

What do you notice about the journeys this time? Can you explain why this happens?