



Main focus of activity:

To work out the co-ordinates of the world cities.

Learning objectives:

- To be able to work with co-ordinates in the first quadrant.
- To be able to work with co-ordinates in all four quadrants.
- To be able to work with column vectors between two points.

Fill in the table below:

World City	Co-ordinates
Las Vegas	
Mexico City	
Ottawa	
Nuuk	
Bogota	
Manaus	
Brasilia	
Buenos Aires	
London	
Venice	
Moscow	
Ulan Bator	
Hiroshima	
New Delhi	
Hong Kong	
Bangkok	
Perth	
Melbourne	
Riyadh	
Suez	
Juba	
Abuja	
Kinshasa	
Port Elizabeth	
Antananarivo	
Bamako	





Round the world air ticket 1

You need to visit two cities from every available continent. You must only travel in a westerly direction (London towards America or Russia towards Europe). You cannot go back on yourself. What is your route?

Round the world air ticket 2

You need to visit two cities from every available continent (three of the cities must be capital cities). You must only travel in a westerly direction (London towards America or Russia towards Europe). You cannot go back on yourself. What is your route?

Round the world air ticket 3

You can visit any 12 cities. You can only travel in an easterly direction. You are only allowed one stop in Australia and one stop in Asia. What is your route?

Once you have selected your route can you then work out the column vectors that connect each city.





World City	Co-ordinates	Column Vector
Las Vegas		
Mexico City		
Ottawa		
Nuuk		
Bogota		
Manuas		
Brasilia		
Beunos Aires		
London		
Venice		
Moscow		
Ulan Bator		
Hiroshima		
New Delhi		
Hong Kong		
Bangkok		
Perth		
Melbourne		
Riyadh		
Suez		
Juba		
Abuja		
Kinshasa		
Port Elizabeth		
Antananarivo		
Bamako		





Question 1

Is this a realistic way of calculating a 'round the world' air ticket?

Question 2

Will working out the distance between the cities be accurate if we use this world map?









