**12B ijk and unit vectors**

1. Consider the points and .
2. Find the position vectors of and in notation.
3. Find the vector as a column vector
4. The vectors and are given as:

and .

1. Find:

i) ii)

b) State, with a reason, whether either of these vectors is parallel to

1. Find the magnitude of

, and hence find , the unit vector in the direction of .

1. Given the vector:

, with magnitude , calculate the angle between the vector and the , , and axes

1. The points and have position vectors and relative to a fixed origin O. Find and show that is isosceles.