**9A Part 2 Cartesian 3D Lines**

1. With respect to the fixed origin O, the line is given by the equation:

Prove that a Cartesian form of the equation of is:

1. Find a Cartesian equation of the line with equation:
2. The line has equation:

The point has position vector:

1. Show that does not line on
2. Given that a circle, centre , intersects at points and , and that has position vector:

Find the position vector of .