**9B Part 1 3D Planes Introduction**

1. Find, in the form $r=a+λb+μc$, an equation of the plane that passes through the points $A(2,2,-1)$, $B(3,2,-1)$ and $C(4,3,5)$



1. Verify that the point $P$ with position vector $\left(\begin{matrix}2\\2\\-1\end{matrix}\right)$ lies in the plane with vector equation:

$$r=\left(\begin{matrix}3\\4\\-2\end{matrix}\right)+λ\left(\begin{matrix}2\\1\\1\end{matrix}\right)+μ\left(\begin{matrix}1\\-1\\2\end{matrix}\right)$$