

Taking $\mathbf{r}_0 = \langle 1, -1, 6 \rangle$ and $\mathbf{r}_1 = \langle 6, 8, 1 \rangle$, we have

$$\mathbf{r}(t) = (1-t)\mathbf{r}_0 + t\mathbf{r}_1 = (1-t)\langle 1, -1, 6 \rangle + t\langle 6, 8, 1 \rangle, \quad 0 \leq t \leq 1 \quad \text{or} \quad \mathbf{r}(t) = \langle 1 + 5t, -1 + 9t, 6 - 5t \rangle, \quad 0 \leq t \leq 1.$$

Parametric equations are $x = 1 + 5t$, $y = -1 + 9t$, $z = 6 - 5t$, $0 \leq t \leq 1$.