

Problems. March 15.

1. Find the curvature of the curve

$$\mathbf{r}(t) = t^4 \mathbf{i} + \ln t \mathbf{j} + t \mathbf{k}$$

at the point where $t = 1$.

2. Find $\mathbf{T}$, $\mathbf{N}$, $\mathbf{B}$ for the curve

$$\mathbf{r}(t) = \cos t \mathbf{i} + \sin t \mathbf{j} + \ln \cos t \mathbf{k}$$

at the point where $t = 0$.