# Name:

1. Calculate the derivative of the vector-valued function $\mathbf{r}(t) = \langle \sin(t), e^{3t}, \cos(2t) \rangle$.

2. Express the line segment from $(3, 1, -2)$ to $(1, 4, 3)$ as a parametric curve $\mathbf{s}(t) = (x(t), y(t), z(t))$, where $t \in [0, 1]$.