

Name _____

Consider the conservative vector field

$$\mathbf{F} = \langle ye^z, xe^z, xye^z \rangle$$

Use the Fundamental Theorem of Line Integrals to evaluate

$$\int_C \mathbf{F} \cdot d\mathbf{r},$$

where C is a smooth, oriented curve from $(-1, 1, 0)$ to $(2, 2, 3)$.