## Line Integrals



## Question

If $\vec{F}$ is a vector field parallel to $\vec{j}$ and $\int_{C_{3}} \vec{F} \cdot d \vec{r}=\int_{C_{1}} \vec{F} \cdot d \vec{r}=3$, then what is the value of $\int_{C} \vec{F} \cdot d \vec{r}$ ?

A. 6
B. 3
C. 0
D. There is not enough information.

