

Green's Theorem

Question

True or False? If $\vec{F} = P\vec{i} + Q\vec{j}$ has scalar curl $\frac{\partial Q}{\partial x} - \frac{\partial P}{\partial y} = 0$ in the first quadrant and C_1 and C_2 are the curves shown, then

$$\int_{C_1} \vec{F} \cdot d\vec{r} = \int_{C_2} \vec{F} \cdot d\vec{r}.$$

- A. True, and I am confident
- B. True, but I am not confident.
- C. False, but I am not confident.
- D. False, and I am confident.

