

Green's Theorem



Question

Which of the following double integrals over the disk D inside the positively oriented circle C is equal to $\int_C \cos(xy)dx + \sin(x)dy$?

- A. $\iint_D (x \sin(xy) + \cos(x))dA$
- B. $\iint_D (y \sin(xy))dA$
- C. $\iint_D (-x \sin(xy) - \cos(x))dA$
- D. $\iint_D (-y \sin(xy))dA$