

1016.

$$\begin{aligned} & \int_C x^2 + y^2 = 1, \quad y \geq 0 \quad \left(\frac{1}{2}, \frac{1}{2}\right) \\ & \int_C \\ & \int_C (1, 0) \rightarrow (1, 0) \end{aligned}$$

$$A = \int_C \left(\frac{2x}{x^2 + y} + 1 \right) dx + \left(\frac{1}{x^2 + y} + 1 \right) dy$$

$$A = \left[\ln(x^2 + y) + x + y \right]_{(1, 0)}^{(1, 0)} = 2$$