1002.

$$A = \oint_{\gamma} ydx - xdy$$

γ: $x^2 + y^2 = 1$, $(1,0) \to (0,1)$

γ: $x = \cos t \quad dx = -\sin t dt$, $y = \sin t \quad dy = \cos t dt$, $t: 0 \to \frac{\pi}{2}$

$$A = \int_{t=0}^{\frac{\pi}{2}} (\sin t(-\sin t) - \cos t \cos t)dt = -\frac{\pi}{2}$$