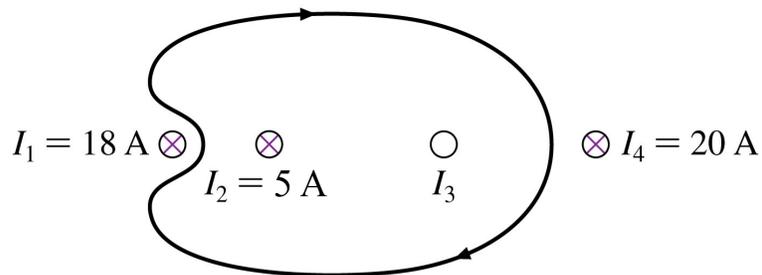


- (2pts) 1. The value of the integral  $\oint \vec{B} \cdot d\vec{\ell} = \mu_0 I_{\text{encl}}$  around the closed path in the figure below is  $1.01 \times 10^{-5} \text{ T m}$ . The four currents in the figure are perpendicular to the page. What are the direction and magnitude of  $I_3$ ?



- (a) 1 A, into the page
- (b) 3 A, into the page
- (c) 5 A, into the page
- (d) 5 A, out of the page
- (e) 3 A, out of the page
- (f) 1 A, out of the page