# Double Integrals over General Regions

## Question

Determine which of the following integrals is equal to

$$\int_0^{\ln(10)} \int_1^{e^x} ye^x \, dydx.$$

A. $\displaystyle\int_1^{10} \int_0^{\ln(y)} ye^x \, dxdy$

B. $\displaystyle\int_1^{10} \int_{\ln(y)}^{\ln(10)} ye^x \, dxdy$

C. $\displaystyle\left(\int_0^{\ln(y)} x \, dx\right)\left(\int_1^{e^x} y \, dy\right)$

D. $\displaystyle\left(\int_0^{\ln(10)} x \, dx\right)\left(\int_1^{10} y \, dy\right)$