Name:
Sec. 3.6-Logarithmic functions
Math 251
Find the derivatives of the following functions

1. $y=\ln \left(e^{-x}+x e^{-x}\right)$
2. $x^{y}=y^{x}$
3. $y=\ln \left(x^{2}+y^{2}\right)$
4. $y=(\ln (x))^{\cos (x)}$
