Reading Quiz #18

姓名：———————— 系級：——————學號：————————— 分數：————————

Read Section 7.4(pages 441-449) and answer the following problems.

1. Use logarithmic differentiation to find the derivative of the function $y = (2x + 1)^5(x^4 - 3)^6$.

2. Use logarithmic differentiation to find the derivative of the function $y = \sqrt[4]{\frac{x^2+1}{x^2-1}}$.

3. Use logarithmic differentiation to find the derivative of the function $y = x^x$.

4. Use logarithmic differentiation to find the derivative of the function $y = (\ln x)^{\cos x}$.