MCV4U Quiz #4 Exponential and Logarithmic Functions Name ……

1. Differentiate:

a) $f(x) = \ln \dfrac{x}{\sqrt{x+1}}$

b) $f(x) = (1 + 5e^{-3x})^4$

c) $f(x) = (x - \ln x)(2^{x^2})$

2. Find the local minimum or maximum points for the function $f(x) = x\ln(x^2)$.

3. Find the inflection points for the function $f(x) = x^2 e^{-x}$.