

King Fahd University of Petroleum and Minerals
Math. & Stat. Departement
QUIZ # 4

Name	ID	SEC	Sr#
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Q1) (5 pts) Find the derivative of the function $f(x) = [x + (x + \sin^2 x)^3]^4$.

Q2)(5 pts) Find $\frac{d}{dx} \left(\lim_{t \rightarrow 0} (1 + xt)^{\frac{3}{t}} \right)$

Q3) (5 pts) Find $\frac{d^2y}{dx^2}$ if $x^3 - y^3 = 7$.

Q4) (5 pts) Find the derivative of the function $y = \cos^{-1}(\sin^{-1}(2t))$.