

King Fahd University of Petroleum and Minerals
Math & Stat. Department
Quiz (1)

Name	ID	SEC	Sr
------	----	-----	----

Q1) Find parametric equations of the tangent line to the curve

$$x = t, y = \frac{1}{2}t^2, z = \frac{1}{3}t^3 \text{ at } t = 2$$

Q2) find the curl and the divergence of the vector field given by

$$\mathbf{F}(x, y, z) = 3x^2y \hat{i} + 2xz^3 \hat{j} + y^4 \hat{k}$$

Q3) Evaluate $\oint_C (x^2 + y^2)dx - 2xy dy$ on the given close curve C .