King Fahd University of Petroleum and Minerals
Math. & Stat. Department
163-Math 101 Quiz (3)

Name	ID	SEC 09

Q1) If $f(x)=\dfrac{g(x^2)}{xe^x}$, $g'(4)=-1$, $g(4)=4$ find the slope of the normal line to the curve $f(x)$ at $x=2$.

Q2) Find all $x\in(0,2\pi)$ at which the tangent lines to $f(x)=\tan x-\cot x$ are parallel to the line $y=4x-1$.

Q3) Find $\frac{d^{25}}{dx^{25}}(x\cos x)$.