

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

Name	ID	SEC 01
------	----	--------

Q1) Let $F(x) = g(x)f(g(x))$. If $f(3) = 4$, $g(2) = 3$, $f'(3) = 5$, $g'(2) = 10$, find $F'(2)$.

Q2) Find $\frac{d^{19}}{dx^{19}}(x \sin x)$.

Q3) Evaluate $\lim_{x \rightarrow \pi/4} \frac{\cot x - 1}{x - \pi/4}$.