King **F**ahd **U**niversity for **P**etroleum and **M**inerals
Department of Mathematics & Statistics
Term 131 Math 101 (09) Quiz#6 (3.6)
Family Name: S.r#

Q1. Find y'

i. $y = (1-x^3)^7$

ii. $y = \tan^3\left(\cos^2(2x)\right)$

Q2. If [$f(1)=9,\ f'(1)=6,\ f(2)=4,$ and $f'(2)=5$], Find

$$\frac{d}{dx}\sqrt{f(2x)}\Big|_{x=1}$$

King **F**ahd **U**niversity for **P**etroleum and **M**inerals
Department of Mathematics & Statistics
Term 131 Math 101 (16) Quiz#6 (3.6)
Family Name: S.r#

Q1. Find y'

$i.\quad y = \dfrac{1}{(x^3-3)^6}$

$ii.\quad y = \sin^2\left(\cot^3(x^2)\right)$

Q2. If $[\ f(1)=2,\quad f'(1)=0,\quad f'(3)=5,\quad g(1)=3,\quad g'(1)=5,\ \text{and}\quad g'(3)=6\ ]$, Find

$$\frac{d}{dx}(f\circ g)\Big|_{x=1}$$