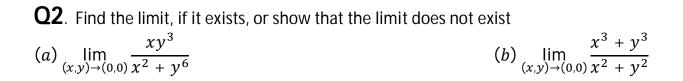
King Fahd University of Petroleum and Minerals

	MATH 201	QUIZ #4	Term 161	
Name:		Serial:	ID:	

Q1. Find and sketch the domain of $f(x, y) = \ln(16 - 4x^2 - 4y^2)$. Find the range of f.



Q3 Find all the second partial derivatives of

$$z = \arctan(\frac{x+y}{1-xy})$$

Q4 Find the linear approximation of $f(x, y, z) = \sqrt{x^2 + y^2 + z^2}$ at (3,2,6) and use it to approximate the number $\sqrt{(3.02)^2 + (1.97)^2 + (5.99)^2}$