

KFUPM

MATH101

Quiz#4

Sec. 7

Name \_\_\_\_\_

Sr.# \_\_\_\_\_

- 1) Find all points on the graph of the function  $f(x) = 2\sin x + \sin^2 x$  at which the tangent line is horizontal.

2) Find the limit  $\lim_{x \rightarrow 0} \csc x \sin(\sin x)$

3) Find equation of both lines that are tangent to the curve  
 $y = x^3 - 3x^2 + 3x - 3$  and are parallel to the line  $3x - y = 15$