MAC 2311 Hybrid Calculus I (B)

Section **3.1**

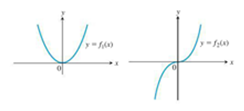
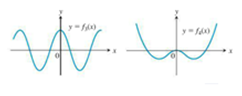
1. Use the limit definition of the derivative (only) to find the slope of the tangent line to

at the point (1, 2)

2. Use the limit definition of the derivative (only) to find a function that gives the slope of the tangent line to .

3. Use the limit definition of the derivative (only) to find the equation of the tangent line to at

4. Given the graph of sketch the graph of.

5.If the line tangent to the curve *y* = *f* (*x*) at (5, 18) is = 4*x* – 2, then

6. If the line tangent to the curve *y* = *g* (*x*) at (5, 18) is = 4*x* – 2, then

7. True/False: if a function is continuous, it is differentiable; and if a function is differentiable it is continuous. Explain with examples.

8. Give 3 different cases, with examples, when a function is not differentiable.