QUIZ 6.1 – 6.2 – NO CALCULATOR

**Multiple choice Questions**  [6]

1. A) B) C) D)
2. What is the average value of on the interval ?

A) B) C) D)
3. Which of the following is the solution of the differential equation ?

A) B) C) D)



1. Which differential equation corresponds to the following slope field?

A) B) C) D)
2. If , then

A) B) C) D)
3. If and when , then

A) B) C) D)

**Free Response Questions:**

1. Determine the following indefinite integrals: [8]
a)

b)

c)

d)
2. Determine the following definite integrals: [6]
a)

b)

c)
3. Find the average value of the function over the interval . [2]
4. Determine an equation for a function *f* such that and . [2]
5. Determine whether each of the following function is a solution of the differential equation: [3]

a) b)
6. Match the differential equation with its slope field. [2]

\_\_\_\_ \_\_\_\_ \_\_\_\_ \_\_\_\_

   

 A) B) C) D)
7. Solve the following differential equations [4]

a) no condition

b) Initial condition: