MAC 2311 Hybrid Calculus I (B)

**Section 4.9**

1. Find

2. = 4x5/5+x+C

3. Solve the IVP ANS:

4. Find the position of a particle moving with

ANS:

5. Determine =

6. Find

7. Find

8. Find

9.

10. Find the position s(t) given the velocity function with the condition s(π/6) =0.

ANS: s(t) =2sin(t)−1

11. Find the position s(t) given the acceleration function with the condition s(0) =3, v(0)= −2.

ANS: s(t) =t3/3+t2/2−2t+3

12. True/False: If , then is the antiderivative of ; Explain. False