**IQRA NATIONAL UNIVERSITY**

**Mid Term Assignment**

**SUBJECT: Calculus**

**Name: Muhammad Khan**

**ID: 16776**

**Q1: The function g (t) is defined by**

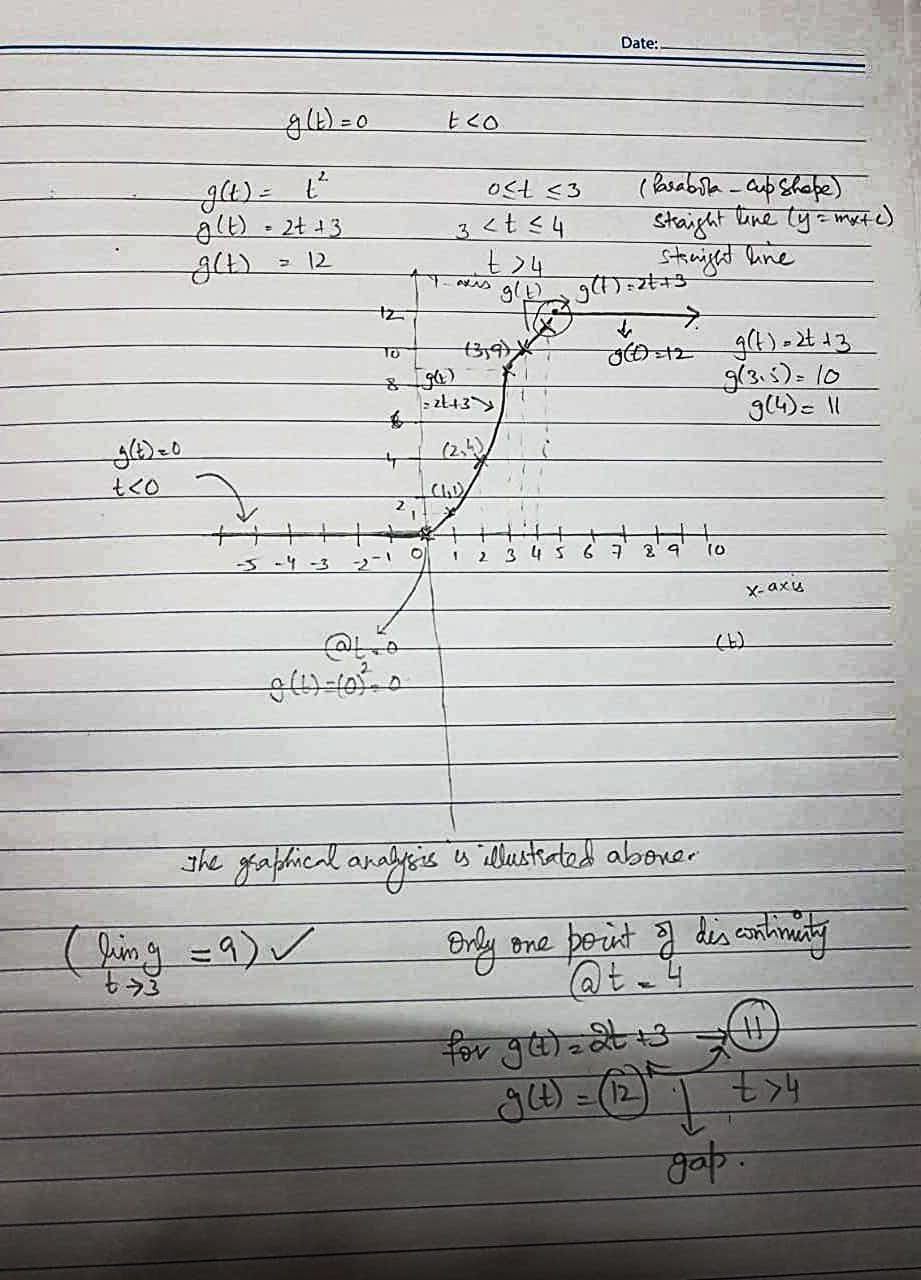
**g(t) = 0 t < 0**

**0 ≤ t ≤ 3**

**2t +3 3 < t ≤ 4**

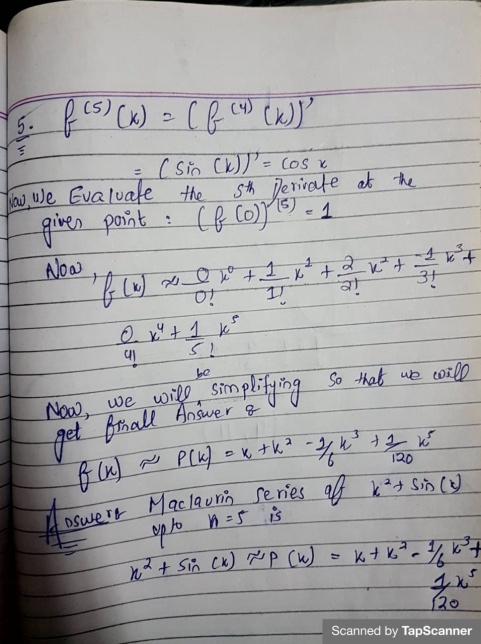
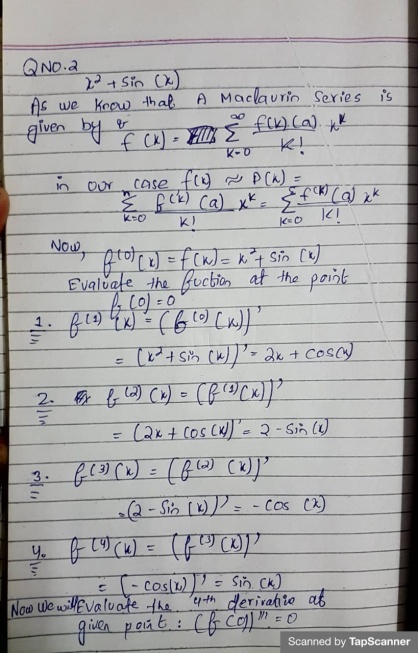
**12 t > 4**

1. **State any point of discontinuity**
2. **Find, if they exist**

****

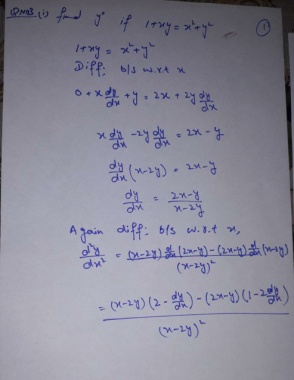
**Q2: Find the Maclaurin’s series for**

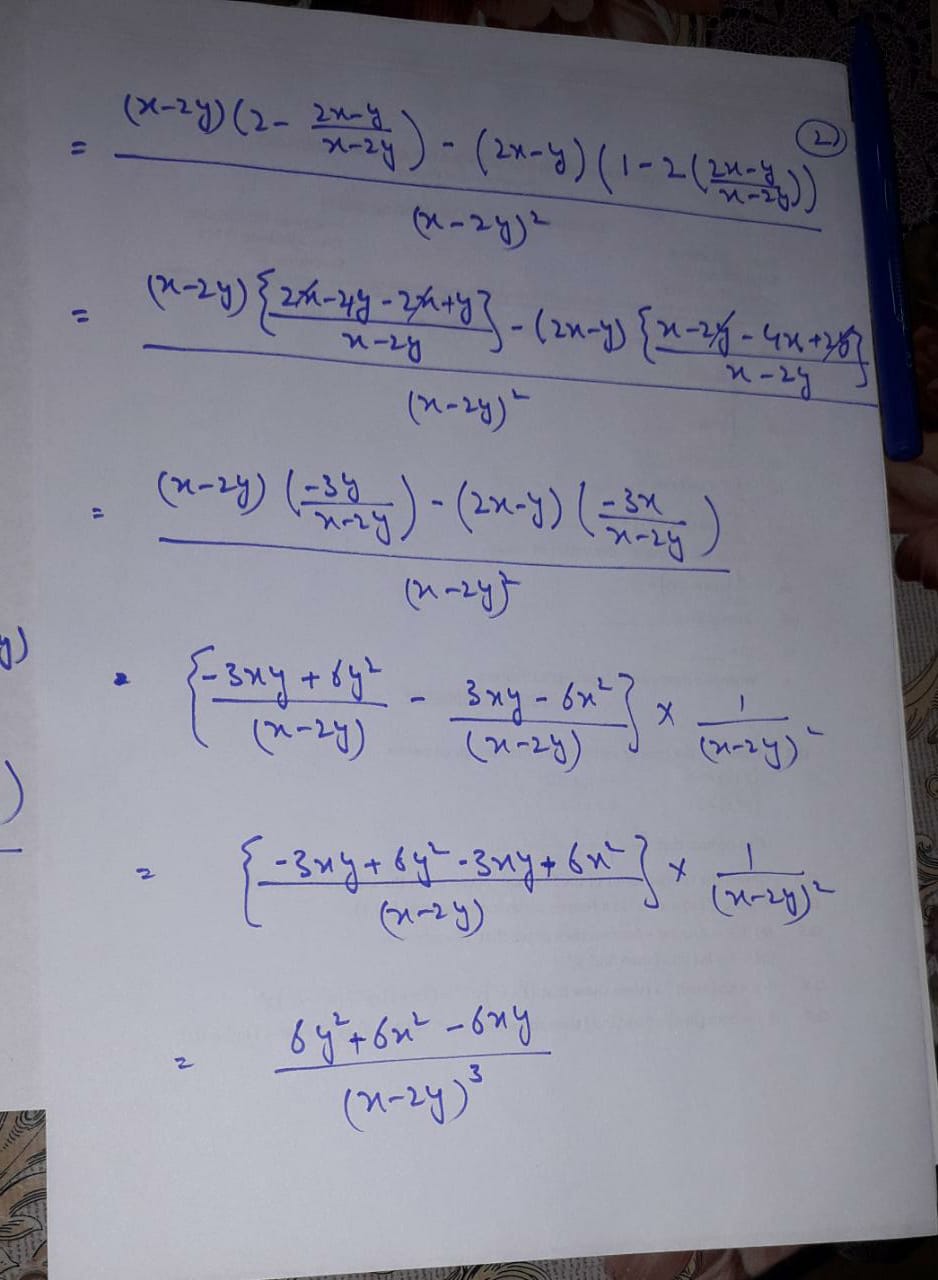
**Y(x) =**

****

**Q3 (a) Find ygiven**

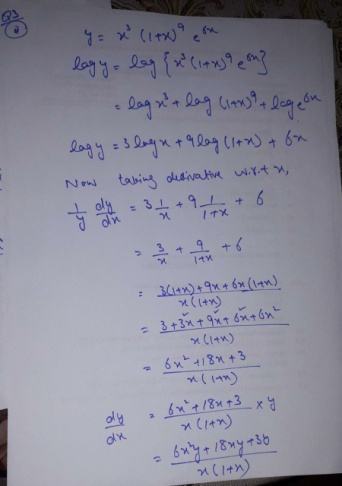
**1+xy =**

****



**(b) Find by using logarithmic differentiation**

**Y =**

****