JOMO KENYATTA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY

##### SMA 2305: COMPLEX ANALYSIS

**CAT 2 1 HOUR**

1. Evaluate when
2. c is the circle 
3. c is the circle 
4. c is the circle  (8 Marks)
5. Expand  in a Laurent Series at  (8 Marks)
6. Find the poles of  (4 Marks)
7. Evaluate the following integral  using

Cauchy’s theorem (5 Marks)

Cauchy’s integral formula (5 Marks)