King Fahd University of Petroleum & Minerals
Department of Mathematics and Statistics
(Semester 172) Math 102 Quiz # 5

Name: _____ I.D. # _____ Sr. # ___

1. Determine whether the series $\sum_{n=1}^{\infty} \frac{e^{2n}}{6^{n-1}}$ converges or diverges. Find its sum if it converges.
2. Determine whether $\sum_{k=1}^{\infty} \frac{k^2}{k^2-2k+5}$ converges or diverges. Find its sum if it converges.
3. Express $5.\overline{12345}$ as a ratio of integers. ($5.\overline{12345}$ means $5.12345\ 12345\ 12345...$)