

**King Fahd University of Petroleum & Minerals**  
Department of Mathematical Sciences  
MATH - 102 Semester 092 **Quiz - 1**

Name: \_\_\_\_\_ ID# \_\_\_\_\_  
Section# \_\_\_\_\_

**Problem .** Find the limit

$$\lim_{n \rightarrow \infty} \sum_{i=1}^n \frac{8}{n} \left( \frac{4i}{n} - 1 \right)^2$$