

KING FAHD UNIVERSITY OF PETROLEUM AND MINERALS
DEPARTMENT OF MATHEMATICS AND STATISTICS
MAT 260 - 2
QUIZ 1

Name:

Student ID #:

If the second digit of your student Id number is odd solve Question 1, otherwise solve Question 2. To receive full credit, all work must be shown.

Question 1. Find the position function of $x(t)$ of a moving particle with the acceleration function $a(t) = 4(t + 3)^2$, initial position $x(0) = 1$, and initial velocity $v(0) = -1$.

Question 2. Find the position function of $x(t)$ of a moving particle with the acceleration function $a(t) = 50 \sin(5t)$, initial position $x(0) = 8$, and initial velocity $v(0) = -10$.

Your Solution.