

**KING FAHD UNIVERSITY OF PETROLEUM AND MINERALS**  
**DEPARTMENT OF MATHEMATICS AND STATISTICS**  
**MATH 102 - QUIZ 4**

Name:

Student ID #:

**Question 1.** Find the area of the surface generated by revolving the curve  $9x = y^2 + 18$ ,  $2 \leq x \leq 6$  about the y-axis.

**Question 2.** Evaluate the integral  $\int_1^2 x^x(1 + \ln x)dx$

**Your Solution.**