Math 226: Quiz **Mar. 16, 1992**

Show your work and circle your final answer.

1. A car buyer borrows $10,000 from a bank at an interest rate of 9% per year compounded continuously. If the buyer pays back the loan continuously over 4 years, determine how much total interest he pays over the life of the loan.

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2. Find an integrating factor for the differential equation

$$(y + e^{y-x}) \, dx + (1 + xe^{y-x}) \, dy = 0$$