King Fahd University of Petroleum and Minerals Department of Mathematics and Statistics

## Math 131 (Term 153) - Quiz 3

## Student Name\_\_\_\_\_

Student ID: \_\_\_

## Exercise 1

In 10 years, a 40,000 SR machine will have a salvage value of 4,000 SR. A new machine at that time is expected to sell for 52,000 SR. In order to provide funds for the difference between the replacement cost and the salvage value, a sinking fund is set up into which equal payments are placed at the end of each year. If the fund earns 7% compounded annually, how much should each payment be? (Round your answer to 2 decimal places)

## Exercise 2

A machine is purchased for 3,000 SR down payment along with payments of 250 SR at the end of every six months for six years. If interest is at 8% compounded semiannually, find the corresponding cash price of the machine. (Round your answer to 2 decimal places)