**FOM 12: Chapter 2 Assignment 1** Due at the end of class **Name**:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Mark:\_\_\_\_\_\_\_\_\_\_\_\_/12

1. Gila took out a loan from the bank to buy a new car that costs $22 500. The bank offered her a simple interest rate of 4.3%. The loan is to be repaid in 5 years. How much interest did Gila need to pay?

Ans)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Oleg took out a $16 000 loan from the bank to pay for school. The bank offered him an interest rate of 5.6%, compounded quarterly. The loan is to be repaid in 3 years. How much interest did Oleg need to pay?

Ans)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Claude has been approved for a $12 400 loan to pay for a new boat. The terms of the loan state that it must be repaid in 4 years at a simple interest rate of 9.6%. How much interest must Claude pay on this loan?

Ans)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Carlos was approved for a mortgage to finance his new house that he purchased for $325 000. He made a down payment that was 20% of the purchase price. The mortgage is compounded semi-annually at an interest rate of 4.2%. Carlos will repay the mortgage in 25 with regular monthly payments. How much will each monthly payment be?

Ans)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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Ans)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Kristina took out a bank loan for $60 000 that must be repaid with regular monthly payments of $1100. The bank charges her an interest rate of 3.0%, compounded monthly. How much interest will Kristina pay?

Ans)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Dante wants to buy a truck that costs $35 000 and he has a two different options to finance the purchase.

Option A: Finance the purchase through the dealership by making regular weekly payments for 4 years at an interest rate of 5.0%, compounded daily.

Option B: Finance the purchase with a bank loan by making regular monthly payments for 4 years at an interest rate of 5.0%, compounded daily.

What is the total cost of the cheaper option?

Option A)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Option B)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Cheaper)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Monty has a credit card balance of $5200.The credit card company charges 19.5% interest, compounded daily. Monty decides to stop using his credit card and to make monthly payments so he can pay off his debt.

a)  How long will it take Monty to reduce his current credit card balance to zero if he pays $250 a month?

b)  If he doubles his monthly payment to $500, how much sooner will his debt be paid off?

c)  How much interest will he save if his monthly payment is $500 rather than $250?

a)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

b)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

c)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Vladimir is buying a house that costs $375 000. He has negotiated a mortgage with the bank that requires a down payment of 12% of the cost of the house. He will pay off the mortgage with regular monthly payments over 25 years at an interest rate of 2.8%, compounded semi-annually. How much will he pay in total?

Ans)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_