**FOM 12: Chapter 2 Assignment 2** 2017 **Name**:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Mark:\_\_\_\_\_\_\_\_\_\_\_\_/15

1. Trish received a bill for $25000 from a landscaping company. She plans to use her secured line of credit,

at 2% above the Bank of Canada rate, to pay the bill. She can afford payments of $400 each month.

* 1. If the Bank of Canada rate is at 0.5 %, compounded monthly, how long will it take Trish to pay off her line of credit? (reminder: add the posted rate to BOC rate for total interest rate)
  2. If the Bank of Canada rate is increased to 1.75%, how much longer will it take her to pay off her line of credit?

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

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

1. Madison wants to visit her parents in Regina at Easter. The return airplane ticket costs $1736. Madison has two options for payment:

• A bank loan with an interest rate of 5.6%, compounded monthly.

• A credit card that offers 0% interest for 3 months and then 16.2%, compounded daily

She plans to make monthly payments of $250. Which option should she choose? Explain.

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Interest for Bank Loan)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Interest for Credit Card)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Better option?)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Monty has a credit card balance of $8000.The credit card company charges 16 % 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?

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

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

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

1. Misty and Danielle are going to be starting their first year of university, and they need somewhere to live.

* Misty’s parents decide to rent a one-bedroom apartment for her, at $800 per month.
* Danielle’s parents buy a four-bedroom house for $205 000, with a down payment of $50 000. They negotiate a 5-year mortgage at 4%, compounded semi-annually, with payments every month. They rent the other three bedrooms to students. Each student pays $750 per month.

Misty and Danielle will both move after 5 years.  
a) Compare the housing costs for Misty’s parents and Danielle’s parents.  
b) Who made the wiser housing decision for their daughter? Explain.

Cost for Misty)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Cost for Danielle)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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

1. Casey works as a handyman. He shoveled snow on 58 days last winter, so he wants a snowplow this year. He has three options:

* He could rent a snowplow for $75 a day.
* He could buy a used snowplow for $6400 and pay with his line of credit at 4.9%, compounded monthly, over 2 years. Snowplows depreciate at a rate of 40% per year.
* He could lease a snowplow for a down payment of $2500 and monthly payments of $200 for 2 years.

What would you recommend for Casey? Explain.

Rend)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Buy)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Lease)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Better?)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_