

TASK: Organize Your Personal Finances

Level 4 Sample Response

1.

Feature	Capital One Mastercard	Home Trust Visa
minimum annual income	None required	\$20,000
initial fee	\$0	\$40
annual fee	\$36	\$96
rewards	*forward balance incentive	**mortgage dollar accumulation
interest rate	11%	18%
interest rate on cash advances	16%	N/A
cash advance limit	\$5000	\$0
security features	***out of country notification ****card inactivation	card inactivation
lost or stolen card procedures	Customer is to call in and inactivate credit card (card holder receives a new card)	Customer is to call in and inactivate credit card (card holder receives a new card)

*Balances from other credit cards can be transferred to this one and the card holder receives a special interest rate for six months (2.9% to 6%)

**For every \$500 spent the credit card holder receives \$1 towards the purchase of a mortgaged home.

***If the card is used out of the country the credit card holder is notified immediately.

****The card can be inactivated in which case the credit card holder is sent a new card with a number card number immediately.

2. a) I would choose to buy a used vehicle.

Annual Income	15% of income	Gas costs	Insurance	Validation Sticker	Vehicle Choice
\$32 500	\$4875	\$40/week \$2080/year	\$1800/year	\$60	Used Car (\$4000) Type: Small compact car

The estimated annual costs are below 15% of the total income, not including the intital purchase price. I could borrow the money for this and pay back regular amounts over two years.

b)

Car Loan Payments:

I assumed 10% interest compounding monthly, and making monthly payments. To pay off the car loan over 2 years, I will need to make monthly payments of \$184.58.

```

N=24
I%=10
PV=4000
PMT=-184.57970...
FV=0
P/Y=12
C/Y=12
PMT: [ ] [ ] BEGIN
    
```

e) Monthly Budget

Loan payment	Gas Cost	Insurance	Maintenance
\$184.58	\$180	\$150	?

Total monthly car cost is approximately \$514.58.

My monthly income is \$2708.33. Since I can live at home, I think I can afford this arrangement even though the car cost is more than 15% of my monthly income. If I need to, I can spread the loan out over more years.

3. Investment choices: 10% of income = \$3250

RRSP at 1.5% compounding monthly	GIC (15 year term) at 4% compounding quarterly	GIC (3 year term) at 2.5% compounding quarterly
\$1200/year	\$1000/year	\$1050/year

I chose these three investments for various reasons. I chose a RRSP because it is a tax free investment used to save money for retirement. I chose to put in \$1200 a year because \$100/month is a good amount and I have at least 30 years until I retire. Also after 30 years the investment will have had a lot of time to grow. The second type of investment I chose was a long term GIC. GICs allow you to invest money at a low interest rate however there is no chance of losing your money. I am going to do this so that I can save up for a down payment for a house. I figure that it will take me along time to save up the money 15 years seems reasonable. A long term GIC provides a higher interest rate than a short term GIC. I also chose a short term GIC because I want to save up for a motorcycle. It has a smaller interest rate but I will need the money sooner because I want to buy a motorcycle as soon as possible.

Doubling time for these investments:

RRSP (\$1200) at 1.5% compounding monthly:
It takes 555 months, or over 46 years for the RRSP investment to double.

```

■ N=554.8642459
I%=1.5
PV=-1200
PMT=0
FV=2400
P/Y=12
C/Y=12
PMT: [END]
    
```

GIC (\$1000) at 4% compounded quarterly:
It takes almost 70 quarter years, or 17.5 years for this GIC investment to double. I notice that this will not be enough money to put a down payment on a house so I will have to invest every year so that they money in the account will increase to the amount I need.

```

■ N=69.66071689
I%=4
PV=-1000
PMT=0
FV=2000
P/Y=4
C/Y=4
PMT: [END] BEGIN
    
```

GIC (\$1050) at 2.5% compounded quarterly:
It takes 111 quarters, or almost 28 years for this GIC investment to double. I notice that this does not meet my goals because I would like to buy a bike in about three years and a good used motorcycle will cost \$2000. If I invest at least \$1050 each year into this account I will have enough money to buy the motorcycle.

```
■ N=111.2497626
  I%=2.5
  PV=-1050
  PMT=0
  FV=2100
  P/Y=4
  C/Y=4
  PMT: [ ] BEGIN
```

Level 4 Notes

Look for the following:

- For question 1, a level four solution will probably also have evidence of research of more than two credit cards, for example printouts from reputable websites and sample application forms for their credit cards of choice.
- For question 2, students will show calculations to justify how much they can afford given their income and reasoning using the 15% of total income \$32 500 as stated at the beginning on p.502. They will also show the total amount of interest generated on a loan if they decide to borrow the money.

Level 3 Notes

A level 3 response to these questions will be very similar to the level 4 response shown above, with the following omissions:

For question 1, a chart will be shown but will lack the explanation to support certain sections in the chart i.e. no explanation of the meaning of terms. The solution may not include any support of student research.

For question 2, the solution will include the car costs but miss the connection that transportation costs should be no more than 15% of your income. Students will determine the total amount owed on a lease or car loan, but will not explain the factors involved in calculating the total or the monthly payments.

For question 3, a level 3 solution will probably show a good attempt to explain why certain investments were chosen but the response will probably lack structure. The solution will probably demonstrate how to find the doubling time of an investment, with using a graph or using the TVM-Solver, but will not provide a written description.

Level 2 Sample Response

1. Bank of Montreal Mastercard

Annual income: None
Initial fee: \$100
Annual fee: \$30
Special features: ?
Interest rate: 15%
Cash advance: Yes.
If your card is lost you must call in and report it.

Visa:

Annual income: None
Initial fee: \$100
Annual fee: \$30
Special features: ?
Interest rate: 15%
Cash advance: Yes.
If your card is lost you must call in and report it.

2. I choose to buy a ford focus because I can afford it, it costs \$23,000. It will cost \$440 a month with 1% interest per year.

Monthly costs: \$440 (payment)
Gas costs \$50/week
Insurance: \$150/month

Total costs: \$640/month.

3. 10% of my income is \$895.

I will invest that into RRSPs because I can save for retirement. I will also invest into mutual funds because the interest rate is higher and I can make a lot more money. I want to save to buy a car so I might be able to make more money. I think will invest in the RRSPs for 30 years and I will invest into mutual funds for only 5 years. By then I would like to own my own car.

Level 2 Notes:

Look for the following:

- some justification and correctness in the student responses however the structure that is apparent in the level 3 and 4 solutions will be missing
- for question 2, no justification of amounts or budget is given
- for question 3, the income of \$32 500 from page 502 is missed

Level 1 Sample Response

1. Bank of Montreal Mastercard

Interest rate: 15%

Cash advance: Yes.

If your card is lost you must call in and report it.

Visa:

Interest rate: 15%

Cash advance: Yes.

If your card is lost you must call in and report it.

2. I choose to buy a 2007 mustang. It costs \$39,000. Each month I will have to pay gas and insurance.

3. My income is \$8000. I think I would invest in the stock market because you can make the most money. I would also invest in RRSPs because they are for retirement and that is a good idea.

Level 1 Notes:

Look for the following:

- little or no effort to explain the answers using mathematical or financial terms
- for question 2, an expensive vehicle is selected without any consideration of how to afford it
- for question 3, the income of \$32 500 from page 502 is missed.and no specific amounts of investments are chosen