HOMEWORK???
Worksheet - Credit Cards and Store Promotions.pdf

3.3 Build Your Skills Detailed Solutions

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6. Brian wants to purchase a new refrigerator. A store offers a deferred payment plan of $1099.99 with a delivery charge of $40.00 and an administration charge of $60.00, both to be paid at the time of sale. He has two years to pay for his purchase without any interest accruing. If the cash price of the fridge is $729.99 plus the delivery charge, how much interest is he actually paying with the deferred payment plan?

Deferred

```
1099.99+40+60
         1199.99
■
```

Cash

```
729.99+40
         769.99
■
```

Difference

```
1199.99-769.99
          430
■
```

4. Phil received a credit card statement dated August 1, on which he owed $505.50. He paid $100.00 before the payment due date.

   a) He is charged interest at a rate of 18.90% on his unpaid balance. How much interest will he pay if he takes until August 21 to pay the balance and he makes no other purchases using the credit card?

   b) If instead Phil makes one purchase of $160.40 on August 16 and makes no other purchases that month, how much will he owe as of August 21?

a) $I = Prt$
$I = 405.50(0.189)(21/365)$
$I = \$4.41$

b) $I = 160.40(0.189)(6/365)$
$I = 0.50$

```
405.50+4.41+160.
4+.5
          570.81
■
```

Notes - Loans.pdf

So You Wanna Borrow Some Money...BANK!!!

loan: money that is borrowed for a specific term, to be paid back with interest **amortization period:** the time required to pay back a loan - interest is calculated from the start date to the end date	**line of credit:** an approved loan amount that you can draw on as needed, with interest charged on the money used - has a credit limit.	**overdraft protection:** an agreement with a bank that allows you to withdraw more money from an account than you have in it, up to a specified amount - if you go over the overdraft, the bank will charge a non-sufficient funds fee ($20 - $50).

*** Many times the interest rate is based upon the Bank of Canada's "**Prime**" rate, which changes periodically.

So You Want Some Quick Cash...Payday Loan???

payday loan: a small, short-term loan with a high interest rate intended to cover the borrower's expenses until their next pay day

- interest is calculated **daily.**

Example 1

A payday loan store charged Matt $40.00 interest on a $350.00 loan. Matt paid back the total amount of $390.00 after 10 days.

a) What was the daily interest rate for this loan?

b) What was the annual interest rate for this loan?

$$I = Prt$$

$$\frac{I}{Prt}$$

b) $r = \dfrac{I}{Pt}$

$r = \dfrac{40}{350(10/365)}$

Calculate part b) first, then calculate part a).

b) Calculate the annual interest rate first using the simple interest formula, where t is given in years.

$$I = Prt$$

$$\$40.00 = \$350.00 \times r \times (10 \div 365)$$

$$\$40.00 = 9.58904r$$

$$\$40.00 \div 9.58904 = r$$

$$4.17101 \approx r$$

Convert the interest rate from a decimal to a percent.

$r = 4.17101 \times 100$

$r \approx 417.1$

The annual interest rate is 417.1%.

a) Calculate the daily interest rate by dividing the annual interest rate by 365.

$r = 417.1 \div 365$

$r = 1.14$

The daily interest rate is 1.14%.

b)

```
40/(350*10/365)
       4.171428571
Ans*100
       417.1428571
Ans/365
       1.142857143
■
```
a)

DISCUSS THE IDEAS

PERSONAL LOANS

A loan can be secured or unsecured. A secured loan means that the borrower has promised to turn over to the lender a particular item of value, such as a car or property, if they **default**, or fail to repay, the principal and interest on the loan. The item of value is **collateral**. An unsecured loan is a loan for which the lender considers you a low risk, so there is no need for collateral.

The interest rate on secured loans is usually lower than the interest rate on unsecured loans.

1. Suggest reasons why the interest rate would be lower on a secured loan.

2. Do you think the amount of money a financial institution would lend someone would change depending on what was being used to secure it? Why or why not?

3. What **assets** might people generally use as collateral to secure a loan?

default: failure to repay a loan

collateral: an item of value pledged by a borrower to secure a loan

asset: an item of economic value owned by an individual that could be converted to cash

SOLUTION

1. The interest rate on a secured loan is usually lower than the interest rate on an unsecured loan because, if you default on the loan, the lender will be compensated by claiming the collateral.

2. A financial institution will usually lend money based on the value of the collateral. If the collateral is a car, the value of the loan will be lower than if the collateral were a house. This is because the lender wants to be able to get back the value of the money they lent out if you default on the loan.

3. Some assets used as collateral include: vehicles, real estate, cash bank accounts, investments, insurance policies, and valuables such as jewellery.

4

PERSONAL LOAN PAYMENT CALCULATOR: MONTHLY PAYMENT PER $1000.00 BORROWED (INTEREST COMPOUNDED MONTHLY)					
Interest rate (%)	Term in years				
	1	2	3	4	5
3.00	84.69	42.98	29.08	22.13	17.97
3.25	84.81	43.09	29.19	22.24	18.08
3.50	84.92	43.20	29.30	22.36	18.19
3.75	85.04	43.31	29.41	22.47	18.30
4.00	85.15	43.42	29.52	22.58	18.42
4.25	85.26	43.54	29.64	22.69	18.53
4.50	85.38	43.65	29.75	22.80	18.64
4.75	85.49	43.76	29.86	22.92	18.76
5.00	85.61	43.87	29.97	23.03	18.87
5.25	85.72	43.98	30.08	23.14	18.99
5.50	85.84	44.10	30.20	23.26	19.10
5.75	85.95	44.21	30.31	23.37	19.22
6.00	86.07	44.32	30.42	23.49	19.33
6.25	86.18	44.43	30.54	23.60	19.45
6.50	86.30	44.55	30.65	23.71	19.57
6.75	86.41	44.66	30.76	23.83	19.68
7.00	86.53	44.77	30.88	23.95	19.80
7.25	86.64	44.89	30.99	24.06	19.92
7.50	86.76	45.00	31.11	24.18	20.04
7.75	86.87	45.11	31.22	24.29	20.16
8.00	86.99	45.23	31.34	24.41	20.28
8.25	87.10	45.34	31.45	24.53	20.40
8.50	87.22	45.46	31.57	24.65	20.52
8.75	87.34	45.57	31.68	24.77	20.64
9.00	87.45	45.68	31.80	24.89	20.76
9.25	87.57	45.80	31.92	25.00	20.88
9.50	87.68	45.91	32.03	25.12	21.00
9.75	87.80	46.03	32.15	25.24	21.12
10.00	87.92	46.14	32.27	25.36	21.25
10.25	88.03	46.26	32.38	25.48	21.37
10.50	88.15	46.38	32.50	25.60	21.49
10.75	88.27	46.49	32.62	25.72	21.62
11.00	88.38	46.61	32.74	25.85	21.74

```
44.43*2.5
            111.075
111.08*12*2
             2665.92
Ans-2500
              165.92
■
```

LOANS: Monthly Payments...

Example 2

Jean-Paul borrows $2500.00 to purchase a laptop computer and software. He takes out a personal loan from his credit union at an annual rate of 6.25% with an amortization period of 2 years. Use the personal loan payment calculator table on the next page to help you answer the questions below.

a) What is Jean-Paul's monthly payment? $44.43 \times 2.5 = \$111.08$

b) Calculate the total amount he will pay over the 2 years.

c) Calculate the finance charge on the loan.

SOLUTION

a) Using the personal loan payment calculator table, first look up the interest rate of 6.25% in the left-hand column, then move across that row to the column showing the monthly payments for 2 years. The payment is $44.43 a month for a loan of $1000.00.

   To calculate the monthly payment for a loan of $2500.00, divide the amount of the loan by $1000.00, then multiply by $44.43.

   $2500.00 ÷ $1000.00 × $44.43 ≈ $111.08

   Jean-Paul's monthly payment is approximately $111.08.

b) He will pay $111.08 a month for 2 years, or 24 months.

   $111.08 × 24 months = $2665.92

   Jean-Paul will pay a total of $2665.92 over the 2 years.

c) The finance charge is the difference between the amount borrowed and the total amount to be repaid.

   $2665.92 – $2500.00 = $165.92

   The finance charge on the loan will be $165.92.

Words of wisdom...
something to remember!!!

- Never pay off credit card debts by only paying minimum payments.

  - Always pay off the balance of your credit card each month to avoid interest.

    - Be careful to check special offers because they could cost you more money.

      - Decide whether you can wait to purchase an item in order to avoid borrowing.

        - Never take out a payday loan.

HOMEWORK...

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Worksheet - Loans.pdf

3.4 Build your Skills Detailed Solutions.pdf

Ready for the test...next Tuesday!

REFLECT ON YOUR LEARNING
FINANCIAL SERVICES

Now that you have finished this chapter you should be able to:

- ☐ describe banking options and discuss their advantages and disadvantages;

- ☐ solve simple interest problems;

- ☐ solve compound interest problems;

- ☐ use the Rule of 72 to estimate the time needed for an investment to double;

- ☐ describe different credit options, including bank and store credit cards, personal loans, lines of credit, and overdrafts;

- ☐ solve problems that involve credit cards;

- ☐ solve problems that involve loans;

- ☐ solve problems that involve sales promotions; and

- ☐ make informed decisions related to the use of credit.

Review Questions...

- Page 138: #1 - 10   **Review - Financial Services.pdf**

   Chapter 3 Financial Services Practice Your New Skills Solutions.pdf

- **Chapter 3 Sample Test.pdf**

Attachments

3.3 - Credit Cards and Store Promotions.pdf

Worksheet - Credit Cards and Store Promotions.pdf

Notes - Loans.pdf

3.4 Build your Skills Detailed Solutions.pdf

Worksheet - Loans.pdf

Chapter 3 Financial Services Practice Your New Skills Solutions.pdf

Chapter 3 Sample Test.pdf

Review - Financial Services.pdf