

# GMF

## Financial Services Review



ATLANTIC CANADA		Card Number:	458 654 566
		Statement Dates:	Nov. 1, 2011 - Nov. 31, 2011
Transaction Date	Posting Date	Activity description	Amount (\$)
PREVIOUS STATEMENT BALANCE			\$56.87
Nov. 02	Nov. 03	PAYMENT - THANK YOU	(\$50.00)
Nov. 06	Nov. 07	Square Pants factory	\$47.00
Nov. 20	Nov. 21	Krusty Crab	\$16.25
Payment Information		Calculating your balance	
Minimum payment		Previous balance	\$
Payment due date	Dec. 10	Payments & credits	\$
Credit Limit	\$2,000.00	Purchases	\$
Available credit		Cash advances	\$
Annual interest rate	18.25%	Interest	\$
		Other fees	\$
		New Balance	\$

- The interest rate is: 18.25%
- What is the previous balance? 56.87
- How much was his payment? 50.00
- How much does he still owe after his payment? 6.87
- What did he purchase in November? 47 + 16.25
- Calculate the new balance. 70.12
- What is his available credit? \$2000 - 70.12 = \$1929.88
- Will Sponge Bob have to pay interest? Why? Yes, didn't pay last statement in full.

Sally invested 2500 at 4.25% interest compounded quarterly for 8 years

- a) What will be the value of her investment after the 8 years?  
b) How much interest will she earn?

$$\#3 \quad A = P \left( 1 + \frac{r}{n} \right)^{nt}$$

a)

$$A = 2500 \left( 1 + \frac{0.0425}{4} \right)^{(4 \times 8)}$$
$$A = 2500 (1.010625)^{32}$$
$$A = 2500 (1.402429996)$$
$$A = 3506.07$$

b)

$$\begin{array}{r} 3506.07 \\ -2500.00 \\ \hline 1006.07 \end{array}$$

	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
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

Isabelle borrowed \$5000 at 5.25% interest for 3 years.

- a) What is her monthly payment?  $\$30.08 \times 5 = \$150.40$
- b) How much does she pay back to the bank in total?  $\$150.40 \times 12 \times 3 = \$5414.40$
- c) What is the finance charge?  $\$5414.40 - \$5000 = \$414.40$

Marsha borrowed \$3560 at 3.25% interest for 2 years.

- a) What is her monthly payment?  $\$43.09 \times 3.560 = \$153.40$
- b) What is the finance charge?  $\$153.40 \times 12 \times 2 = \$3681.60$   
 $\$3681.60 - \$3560 = \$121.60$

Justin borrowed \$10000 at 6% interest for 4 years.

- a) What is his monthly payment?  $\$23.49 \times 10 = \$234.90$
- b) What is the finance charge?  $\$234.90 \times 12 \times 4 = \$11275.20$   
 $\$11275.20 - \$10000 = \$1275.20$

④ \*\*\* Are there any limitations when using internet banking?  
 (Is there anything you can't do?)  
*You will not be able to withdraw cash.*



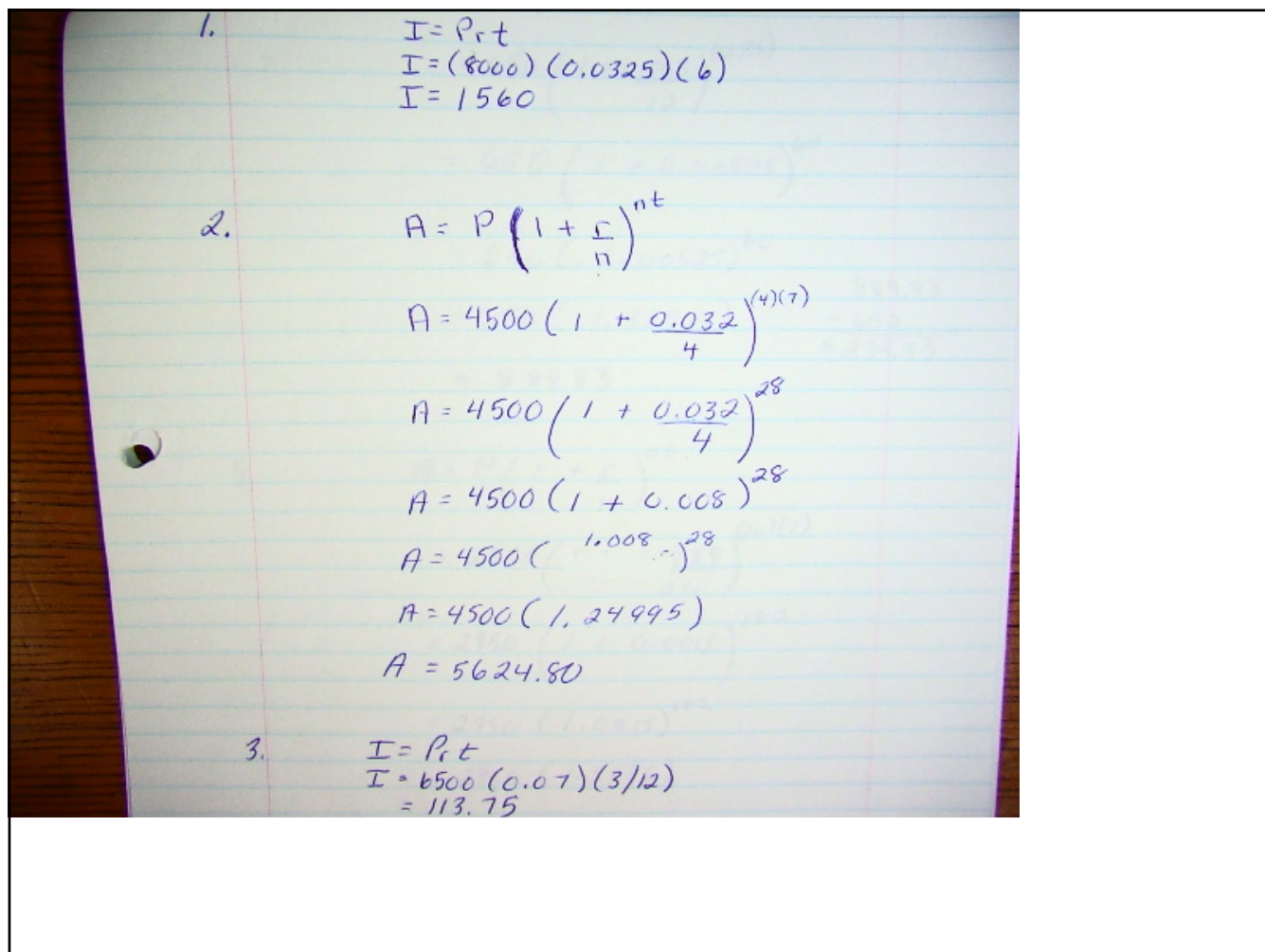
Review for Test

Solve each of the following using simple or compound interest:

1. Jim wants to invest \$8000.00. His bank offers an investment option that earns simple interest at a rate of 3.25% per year. How much interest would Jim earn on his investment after 6 years?
2. Troy wants to invest \$4500.00. His bank offers an investment option that earns interest compounded quarterly at a rate of 3.2% per year for 7 years. ~~How much would he have after 4 years?~~
3. Ava's bank offers a simple interest rate of 7% per annum. How much interest would Ava earn on her investment of \$6500.00 after 3 months?
4. Ryan wants to invest \$650.00. His bank offers an investment option that earns interest compounded monthly at a rate of 6.3% per year for 5 years. ~~How much would he have after 8 years?~~
5. Ben wants to invest \$2950.00. His bank offers an investment option that earns interest compounded biweekly at a rate of 3.9% per year for 7 years. ~~How much would he have after 6 years?~~

Using the simple interest equation calculate the unknown  $(I = Prt)$

6. The interest earned on a deposit is \$89.00 with an interest rate of 4.2% per annum. If the money was invested for 4 years, **what is the principal?**
7. The interest earned on a deposit is \$210.00 with an interest rate of 6.5% per annum. If the money was invested for 6 years, **what is the principal?**
8. The interest earned on a deposit of \$5000.00 is \$78.00. If the money was invested for 7 years, **what is the interest rate?**
9. The interest earned on a deposit of \$6250.00 is \$92.00. If the money was invested for 4 years, **what is the interest rate?**
10. The interest earned on a deposit of \$4800.00 is \$50.00 with an interest rate of 3.95%. **How many years** was the money invested?



1.  $I = Prt$   
 $I = (8000)(0.0325)(6)$   
 $I = 1560$

2.  $A = P \left( 1 + \frac{r}{n} \right)^{nt}$   
 $A = 4500 \left( 1 + \frac{0.032}{4} \right)^{(4)(7)}$   
 $A = 4500 \left( 1 + \frac{0.032}{4} \right)^{28}$   
 $A = 4500 (1 + 0.008)^{28}$   
 $A = 4500 (1.008)^{28}$   
 $A = 4500 (1.24495)$   
 $A = 5624.80$

3.  $I = Prt$   
 $I = 6500 (0.07) (3/12)$   
 $= 113.75$

4.

$$A = P \left( 1 + \frac{r}{n} \right)^{nt}$$
$$= 650 \left( 1 + \frac{0.063}{12} \right)^{(12)(5)}$$
$$= 650 \left( 1 + 0.00525 \right)^{60}$$
$$= 650 ( 1.00525 )^{60}$$
$$= 650 ( 1.36913 )$$
$$= 889.93$$

	889.93
	- 650
	<hr/>
	\$ 239.93

5.

$$A = P \left( 1 + \frac{r}{n} \right)^{nt}$$
$$= 2950 \left( 1 + \frac{0.039}{26} \right)^{(26)(1)}$$
$$= 2950 \left( 1 + 0.0015 \right)^{182}$$
$$= 2950 (1.0015)^{182}$$
$$= 2950 (1.3136)$$
$$= 3875.21$$



$$\begin{aligned} 6. \quad I &= Prt \\ 89 &= P(0.042)(4) \\ 89 &= P(0.168) \\ 529.76 &= P \end{aligned}$$

$$\begin{aligned} 7. \quad I &= Prt \\ 210 &= P(0.065)(6) \\ 210 &= P(0.39) \\ 538.46 &= P \end{aligned}$$

$$\begin{aligned} 8. \quad I &= Prt \\ 78 &= 5000(r)(7) \\ 78 &= 35000r \\ 0.0022 &= r \\ 0.22\% \end{aligned}$$

$$\begin{aligned} 9. \quad I &= Prt \\ 92 &= 6250(r)4 \\ 92 &= 25000r \\ 0.00368 &= r \\ 0.368\% &= r \end{aligned}$$

