

Name _____
© www.TheTeachersCorner.net

Financial Services

Write the letter of the correct match next to each problem.

- | | |
|----------------------------------|--|
| 1. <u>Q</u> term | a. an agreement with a bank that allows you to withdraw more money from an account than you have in it |
| 2. <u>H</u> PIN | b. failure to repay a loan |
| 3. <u>B</u> default | c. an item of economic value owned by an individual that could be converted to cash |
| 4. <u>N</u> cash advance | d. $I=Prt$ |
| 5. <u>P</u> full-service banking | e. an agreement in which a borrower receives something of value, and agrees to pay for it later |
| overdraft | f. banking that is done over the Internet; by telephone; or ATM |

6.	A	protection	
7.	O	principal	g. an item of value pledged by a borrower to secure a loan
	F	self banking	h. a secret number (password) to help protect your identity
9.	W		i. an approved loan amount that you can draw on as needed, with interest
10.	K	down payment	j. an estimate of the time it takes to double the investment
11.	S	transaction	k. a partial payment sometimes required at the time of purchase
12.	D	simple interest	l. money earned on an investment or a fee paid for borrowing money
13.	L	interest	m. the time between calculations of interest
		compound	n. a withdrawal of cash from an ATM or bank teller charged to a credit card
14.	T	interest	
		compounding	o. the original amount invested or borrowed
15.	m	period	
16.	i	line of credit	p. banking that is done with the help of a teller

16.	i	line of credit	p.	banking that is done with the help of a teller.
17.	v	loan	q.	the time in years for an investment or loan
18.	w	payday loan	r.	the total amount of interest paid to borrow a sum of money
19.	u	amortization period	s.	any activity recorded on your bank statement (cash withdrawal, deposit, money transfer, bill payment, etc)
20.	G	collateral	t.	the interest paid on the principal PLUS interest
21.	E	credit	u.	the time required to pay back a loan
22.	C	asset	v.	money that is borrowed for a specific term, to be paid back with interest
23.	R	finance charge	w.	a small, short-term loan with a high interest rate intended to cover the borrower's expenses until their next pay day

Review for Test (Sheet #2)

Solve each of the following using simple or compound interest:

1. Sam wants to invest \$7200.00. His bank offers an investment option that earns simple interest at a rate of 6.23% per year. How much interest would Jim earn on his investment after 5 years?
2. Alex wants to invest \$5600.00. His bank offers an investment option that earns interest **compounded** monthly at a rate of 2.75% per year. How much would he have after 9 years?
3. Kayla's bank offers a **simple interest** rate of 7% per annum. How much interest would Kayla earn on her investment of \$6500.00 after 3 months?
4. Jeff wants to invest \$2375.00. His bank offers an investment option that earns interest **compounded** semi-annually at a rate of 3.3% per year. How much would he have after 10 years?
5. Bill wants to invest \$950.00. His bank offers an investment option that earns interest **compounded biweekly** at a rate of 3.9% per year. How much would he have after 6 years?

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

1. The interest earned on a deposit is \$102.00 with an interest rate of 3.2% per annum. If the money was invested for 5 years, what is the principal?
2. The interest earned on a deposit is \$63.00 with an interest rate of 5.8% per annum. If the money was invested for 7 years, what is the principal?

3. The interest earned on a deposit of \$12000.00 is \$256.00. If the money was invested for 6 years, what is the interest rate?
4. The interest earned on a deposit of \$8250.00 is \$112.00. If the money was invested for 3 years, what is the interest rate?
5. The interest earned on a deposit of \$9300.00 is \$160.00 with an interest rate of 3.95%. How many years was the money invested?

Calculate the interest, and minimum payments on the following credit cards.
(5.00% or \$10.00, whichever is greater).

a) Unpaid balance: \$511.00 Interest: _____
Interest rate per annum: 17.00% per annum Minimum Payment: _____
Time: 21 days

b) Unpaid balance: \$762.00 Interest: _____
Interest rate per annum: 19.95% per annum Minimum Payment: _____
Time: 29 days

Calculate the interest, and minimum payments on the following credit cards.
 (5.00% or \$10.00, whichever is greater).

a) Unpaid balance: \$511.00 Interest: _____
 Interest rate per annum: 17.00% per annum Minimum Payment: _____
 Time: 21 days

b) Unpaid balance: \$762.00 Interest: _____
 Interest rate per annum: 19.95% per annum Minimum Payment: _____
 Time: 29 days

c) Unpaid balance: \$93.00 Interest: _____
 Interest rate per annum: 17.75% per annum Minimum Payment: _____
 Time: 14 days

Review for Test (Sheet #2)

$$\begin{aligned} 1. \quad I &= Prt \\ &= (7200)(0.0623)(5) \\ &= \$2242.80 \end{aligned}$$

$$\begin{aligned} 2. \quad A &= P \left(1 + \frac{r}{n} \right)^{nt} \\ &= 5600 \left(1 + \frac{0.0275}{12} \right)^{(12)(9)} \\ &= 5600 \left(1.00229 \right)^{108} \\ &= 5600 (1.280) \\ &= \$7170.56 \end{aligned}$$

$$\begin{aligned} 3. \quad I &= Prt \\ &= (6500)(0.07)\left(\frac{3}{12}\right) \\ &= \$113.75 \end{aligned}$$

$$\begin{aligned} 4. \quad A &= P\left(1 + \frac{r}{n}\right)^{nt} \\ &= 2375\left(1 + 0.033\right)^{(2)(10)} \\ &= 2375\left(1.0165\right)^{20} \\ &= 2375(1.38782) \\ &= \$3294.67 \end{aligned}$$

$$\begin{aligned} 5. \quad A &= P \left(1 + \frac{r}{n} \right)^{nt} \\ &= 950 \left(1 + \frac{0.039}{26} \right)^{(26)(6)} \\ &= 950 (1.0015)^{156} \\ &= 950 (1.2634) \\ &= \$1200.25 \end{aligned}$$

Part 2.

$$\begin{aligned} 1. \quad I &= Prt \\ 102 &= P(0.032)(5) \\ 102 &= P(0.16) \\ *637.50 &= P \end{aligned}$$

$$\begin{aligned} 2. \quad I &= Prt \\ 63 &= P(0.058)(7) \\ 63 &= P(0.406) \\ \$155.17 &= P \end{aligned}$$

$$\begin{aligned} 3. \quad I &= Prt \\ 256 &= 12000(r)(6) \\ 256 &= 72000r \\ 0.00356 &= r \\ r &= 0.356\% \end{aligned}$$

4.

$$I = Prt$$
$$112 = 8250 (r) (3)$$
$$112 = 24750 r$$
$$0.004525 = r$$
$$r = 0.45\%$$

5.

$$I = Prt$$
$$160 = 9300 (0.0395) t$$
$$160 = 367.35 t$$
$$0.4355 = t$$

Q. 1 ?

Part 3

<p>a) $I = Prt$ $= 511(0.17)(\frac{21}{365})$ $= 4.998$ $= \\$5.00$</p>	<p>Minimum Payment $\\$511 \times 0.05$ 25.55</p>
<p>b) $I = Prt$ $= 762(0.1995)(\frac{29}{365})$ $= \\$12.08$</p>	<p>$\\$762 \times 0.05$ $\\$38.10$</p>
<p>c) $I = Prt$ $= (93)(0.1775)(\frac{14}{365})$ $= \\$0.63$</p>	<p>$\\$93 \times 0.05$ $\\$4.65$ <u>\$10</u></p>

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

<p>Payment Information</p> <p>Minimum payment</p> <p>Payment due date Dec. 10</p> <p>Credit Limit \$2,000.00</p> <p>Available credit</p> <p>Annual interest rate 18.25%</p>	<p>Calculating your balance</p> <p>Previous balance \$</p> <p>Payments & credits \$</p> <p>Purchases \$</p> <p>Cash advances \$</p> <p>Interest \$</p> <p>Other fees \$</p> <p>New Balance \$</p>
---	--

	1	2
3.00	84.89	42
3.25	84.81	43
5.00	85.61	43
5.25	85.72	43
5.50	85.84	44
5.75	85.95	44
6.00	86.07	44
6.25	86.18	44
6.50	86.30	44
6.75	86.41	44
7.00	86.53	44

Isabelle borrowed \$50

a) What is her monthly payment?

b) How much does she pay back?

c) What is the finance charge?

Marsha borrowed \$35

a) What is her monthly payment?

b) What is the finance charge?

Justin borrowed \$100

a) What is his monthly payment?

b) What is the finance charge?

1. The interest rate is: 18.25%

2. What is the previous balance? 56.87

3. How much was his payment? 50.00

4. How much does he still owe after his payment? 6.87

5. What did he purchase in November? \$47, \$16.25

6. Calculate the new balance. \$70.12

7. ~~If the interest is 17%~~, what will his minimum payment be? \$3.51 - \$10.00

8. What is her available credit? \$1929.88

9. Will Sponge Bob have to pay interest? Why? yes, because he didn't pay the full amount.

9. Will Sponge Bob have to pay interest? Why? Yes, because he didn't pay the full amount.

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?

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

$$= 2500\left(1 + \frac{0.0425}{4}\right)^{(4)(8)}$$

$$= 2500(1.010625)^{32}$$

$$= 2500(1.4024)$$

$$= \$3506.07$$

b) Interest?

$$\begin{array}{r} \$3506.07 \\ - 2500 \\ \hline \$1006.07 \end{array}$$

*** Are there (Is there anyt) Wit

Sponge Bob
458 654 566
Nov. 1, 2011 - Nov. 31, 2011

Description	Amount (\$)
	\$56.87
- THANK YOU	(\$50.00)
nts factory	\$47.00
lb	\$16.25
Closing your balance	
balance	\$
ts & credits	\$
es	\$
vances	\$
ees	\$
lance	\$

**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	28.03	22.13	17.57
3.25	84.81	43.09	28.15	22.24	17.68
3.50	84.93	43.20	28.27	22.35	17.79
3.75	85.05	43.31	28.38	22.46	17.90
4.00	85.17	43.42	28.50	22.57	18.01
4.25	85.29	43.53	28.61	22.68	18.12
4.50	85.41	43.64	28.72	22.79	18.23
4.75	85.53	43.75	28.83	22.90	18.34
5.00	85.65	43.86	28.94	23.01	18.45

Isabelle!

a) $\$30.05 \times 5$
 $\$150.40$

b) $\$150.40 \times 12 \times 3$
 $\$5414.40$

c) $\$5414.40$
 $- 5000$
 $\$414.40$

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

a) What is her monthly payment?
b) How much does she pay back to the bank in total?
c) What is the finance charge?

Marsha

a) 43.09×3.56
 $= \$153.40$

b) $\$153.40 \times 12 \times 2$
 $= \$3681.60$
 $\$3681.60$

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

a) What is her monthly payment?
b) What is the finance charge?

6.87

16.25

2

<p>nces \$ s \$ nce \$</p>	<p>Isabelle borrowed \$5000 at 5.25% interest for 3 years.</p> <p>a) What is her monthly payment? b) How much does she pay back to the bank in total? c) What is the finance charge?</p>	
<p>6.87 6.25 \$3.51 - \$10.00 yes, because he didn't pay the full amount.</p>	<p>Marsha borrowed \$3560 at 3.25% interest for 2 years.</p> <p>a) What is her monthly payment? b) What is the finance charge?</p> <p>Justin borrowed \$10000 at 6% interest for 4 years.</p> <p>a) What is his monthly payment? b) What is the finance charge?</p>	<p>Marsha a) $43.09 \times 3.56 = \\$153.40$ b) $\\$153.40 \times 12 \times 2 = \\3681.60 $\\$3681.60 - 3560 = \\121.60</p>
<p>for 8 years he 8 years? b) Interest? $\\$3506.07 - 2500 = \\1006.07</p>	<p>*** Are there any limitations when using internet banking? (Is there anything you can't do?) Withdraw money.</p>	<p>Justin a) $23.49 \times 10 = \\$234.90$ b) $234.90 \times 12 \times 4 = \\11275.20 $\\$11275.20 - 10000 = \\1275.20</p>