## Student Activity 1

## Work with your partner to answer the following questions.

Problem 1: Use an online loan calculator to fill in the blanks.

- Loan amount: \$5,000 Loan term: 2 years
Interest rate: 6\%
- Loan amount: \$5,000

Loan term: 2 years
Interest rate: 5\%

- Loan amount: \$5,000

Loan term: 3 years
Interest rate: 6\%

Monthly payment:
Total Repayment:
Interest paid: $\qquad$

Monthly payment: $\qquad$
Total Repayment: $\qquad$
Interest paid: $\qquad$
Monthly payment: $\qquad$
Total Repayment: $\qquad$
Interest paid: $\qquad$

Which of the plans above for the $\$ 5000$ loan will cost the least in interest?

Problem 2: Marty is planning on taking out a loan for $\$ 1500$ for 2 years. He wants to know how much more it will cost him in interest if he uses a credit card, at $20 \%$ interest, instead of borrowing from the bank at $8 \%$ interest.
Use an online loan calculator and determine the cost of using the credit card:

Use an online Ioan calculator and determine the cost of borrowing the money at the bank.

How much more will it cost him to put the $\$ 1500$ on his credit card?

Problem 3: Janie has 3 options she is trying to decide on to finance her car. Her choices are:
a) finance with the car dealer for $12 \%$ interest for 3 years
b) finance with the car dealer for $12 \%$ interest for 5 years
c) finance with the bank for $6.5 \%$ interest for 3 years

Determine the monthly payment for each choice.
a)
b)
c)

Determine the total repayment for each choice.
a)
b)
c)

Which choice do you think she should take? Why

NAME $\qquad$ DATE $\qquad$ SCORE $\qquad$ $/ 5$

### 8.12A Skills and Concepts Homework 1

1. What does APR stand for?
2. If you borrow $\$ 2,500$ at $6 \%$ interest for 2 years, your monthly payment will be $\$ 110.80$. How much interest will you have paid during these 2 years for the loan?

If you had shopped around you could have gotten the loan for $5.5 \%$ interest rate instead of the $6 \%$. You monthly payments would have been $\$ 110.24$. Would this savings a month be worth the time you would spend looking for a lower interest rate?
3. You have 3 options for a $\$ 4,000$ loan.

Option 1: 7\% interest for 3 years Monthly payment: \$123.51
Option 2: 6\% interest for 2.5 years Monthly payment: \$143.92
Option 3: 8\% interest for 2 years Monthly payment: \$180.91
Determine the repayment amount for each option.

Which option requires the least amount of interest?
4. Which 2 things must you consider when trying to get a loan?

What might affect your decision?
5. Sue can get a student loan for $\$ 12,000$ for 10 years at an annual interest rate of $5 \%$ or borrow the same amount for 6 years at a rate of $4 \%$. Which do you think Sue should do? Why?
$\qquad$ DATE $\qquad$ SCORE $\qquad$

### 8.12A Skills and Concepts Homework 2

1. How does the term or length of a loan affect the repayment amount?
2. Complete the table below.

| Loan Calculations |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Amount <br> of Loan | Length <br> of Loan | Annual Interest <br> Rate | Monthly <br> Payment | Total <br> Repayment | Total <br> Interest Paid |
| $\$ 4,000$ | 3 yr | $5 \%$ | $\$ 119.88$ |  |  |
| $\$ 4,000$ | 3 yr | $6 \%$ | $\$ 121.69$ |  |  |
| $\$ 4,000$ | 3 yr | $7 \%$ | $\$ 123.51$ |  |  |

How did the $1 \%$ increase in interest per year affect the total repayment amount?
3. Complete the table below.

| Loan Calculations |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Amount <br> of Loan | Length <br> of Loan | Annual Interest <br> Rate | Monthly <br> Payment | Total <br> Repayment | Total <br> Interest Paid |
| $\$ 4,000$ | 3 yr | $5 \%$ | $\$ 119.88$ |  |  |
| $\$ 4,000$ | 2.5 yr | $5 \%$ | $\$ 142.12$ |  |  |
| $\$ 4,000$ | 2 yr | $5 \%$ | $\$ 175.49$ |  |  |

How did the 6 month decrease in loan length affect the total repayment amount?
4. Judy has a credit card balance of $\$ 7,500$. She is determined to pay it off in 36 payments. The credit card company charges $19.8 \%$ annual interest. Using an online loan calculator, determine what monthly payment she needs to make to pay the credit card balance off in 36 months.
5. Jorge has a credit card balance of $\$ 13,000$. His credit card company charges an annual interest rate of $20 \%$. He gets an offer in the mail from a new card company for an interest rate of $15 \%$. He can only afford to pay $\$ 250$ a month. If he transfers his balance to the new card company, how much will he save? Use a credit card payoff calculator. Go to www.bankrate.com Click on Credit Cards in the choices at the top. Then on the middle left side, find Credit card payoff Calculator. Click on it and enter your information.

