## Possible Solutions

## Example 1

Sarah is trying to decide if she should take out a Holiday loan for $\$ 2000$ with a $5.25 \%$ interest rate for one year or a $\$ 2,500$ loan at $4.75 \%$ for 2 years. She decides to use an online calculator to quickly make her decision. Which loan would be the best for Sarah and why?

Select Loan Calculator and enter in the parameters of the problem.


Sarah should take out the Holiday loan if she does not want to pay much in interest, but take out the two year loan if she wants lower monthly payments.

## Example 2

Mr. Gonzales is taking out a loan to buy a house. The price of the house is $\$ 245,000$. He is wondering what type of loan would be best. His options are a $3.5 \%$ fixed loan for 30 years, $4.5 \%$ fixed loan for 15 years or a variable rate loan for 10 years. Which loan should Mr. Gonzales choose? Why?

A fixed rate means that the rate will stay the same throughout the loan. A variable rate means that the rate will go up and go down. It is usually best to take a fixed rate.

Mr. Gonzales used an online calculator to help him make a decision. e decided that he was not ready to risk a variable rate.

Mortgage Calculator

| Home Price $\$$ | 245000 |
| :--- | :--- |
| Down Payment | 0 |
|  | \% |
| Loan Term | 30 |
|  | years |
| Interest Rate | 3.5 |
|  |  |


| Monthly Pay: \$1,100.16 |  |
| :--- | ---: |
| Total of 360 Mortgage Payments | $\$ 396,057.41$ |
| Total Interest | $\$ 151,057.41$ |
| Mortgage Payoff Date | Nov. 2045 |

Mortgage Calculator

| Home Price \$ | 245000 |
| :---: | :---: |
| Down Payment | 0 |
| Loan Term | 15 |
| Interest Rate | 4.5 |

[^0]Once these two fixed options are compared, Mr. Gonzales needs to decide if he can make the monthly payments for the 15-year fixed loan. If he would afford the higher payment, then he will save a considerable amount of money in interest.


[^0]:    Monthly Pay: \$1,874.23
    Total of 180 Mortgage Payments $\$ 337,362.04$
    Total Interest $\quad \$ 92,362.04$
    Mortgage Payoff Date Nov. 2030

