**Lab Assignment 4.2**

**Mortgage**

**Create two new classes called, Mortgage and MortgageCalculator, in your DataTypes project.**

Write a program that will compute a monthly mortgage payment. A monthly mortgage payment is the same as a monthly loan payment. Normally, real estate loans are called mortgage loans. In this case you know the amount of the loan, called the **principal**, the annual **interest** paid, and the length of **time** to pay back the loan. The program needs to take that information and compute the monthly payment. Use the information and the provided formula below:

The letters in the formula below represent the following values:

**P** - - **Principal** amount borrowed, or loan amount

**R** - - **R**ate of interest computed for each month

**N** - - **N**umber of months to pay back the loan or mortgage

**Important Note**

The formula requires the number of months to pay back the loan, not the number of years. There are also two issues with the interest. The number is written as 5.75, but 5.75% = 0.0575. On top of that you are provided with annual interest, but the formula requires monthly interest. In all of these cases, you need to make the program do the necessary conversions so the formula will work.

**Everything else must be computed by the program**. For example, a command like **numMonths = 360;** or worse **monthlyPayment = 1319.23** will cause you to earn a 0 on this lab. The program must do its own calculations.

Use your code to be able to make an output like the code shown below. This includes the percent signs and dollar signs.

