Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

***Problem Set 6.5: Home Loans/Mortgages***

**PROBLEM 1) JAVAUN**

Javaun is planning to purchase a new home. The seller has agreed to a price of $278,000 and Javaun is going to put contribute a 20% down-payment to his lender (therefore he will only be taking a loan for 80% of the price). He has two options for a loan. Fill in the missing pieces of the chart below and help Javaun make an informed decision.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Term** | **Interest Rate** | **Monthly Payment** | **Total Dollars Paid (Excluding down-payment)** | **Total Interest Paid over the course of the loan**  |
| Loan 1  | 30 year fixed | 4.8% | $1,166.86 | $ 420,068.07 | $197,668.07 |
| Loan 2 | 15 year fixed  | 4.1% | $ 1,656.23 | $298,121.97 | $75,721.97 |

**PROBLEM 1) ELLEN AND PORTIA**

Ellen and Portia are shopping around for a new “investment” property. Ellen is a very generous woman and they are looking for a property they can purchase to use so that they can provide temporary housing for families who have had a traumatic life event and need a place to just get back on their feet. They’ve estimated that they can afford a monthly payment of $1200 and they have set aside $35,000 aside to use as a down-payment. Fill in the missing pieces of the chart to see how much of a loan they can afford to take and spend on a home.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Term** | **Interest Rate** | **Loan Amount** | **Total Amount to be spent on the home** | **Total Interest Paid over the course of the loan** |
| Loan 1  | 15 year fixed | 3.8% | $ 161,136.70 | $ 196,136.73 | $ 54,863.27 |
| Loan 2 | 30 year fixed  | 4.4% | $ 228,717.20 | $ 263,717.22 | $ 203,282.78 |