## Hand In Assignment - Mortgages

Name: $\qquad$ Total Marks: $\qquad$ /13

1. Rachel and Cody find a house for $\$ 150000$ that they want to purchase. Between the two of them they have $\$ 100000$ saved up for a down payment. The bank offers them a mortgage at $4.25 \%$ amortized over 15 years
a) How much do they need to borrow (find the mortgage amount)?
b) What is the monthly mortgage payment?
c) What is the monthly interest on the first month's payment?
d) What is the interest over the life of the mortgage?
2. Mary purchases a home for $\$ 150000$. She makes a down payment of $\$ 80000$ and takes out a fixed-rate mortgage at $5 \%$ for the balance of the purchase price. The mortgage is to be amortized over 10 years. Complete an amortization table for this mortgage for the first three months.

| Monthly <br> Payment | Interest <br> Payment | Principal <br> Payment | Owner's <br> Equity | Unpaid <br> Balance |
| :--- | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

3. Use the Gross Debt Service Ratio formula for the following situation and state whether this house is affordable.
a) Monthly mortgage payment $\$ 363$, monthly property taxes $\$ 118$, monthly heating costs \$96, gross monthly income \$2 975
b) Monthly mortgage payment \$716, annual property taxes \$1980, monthly heating costs $\$ 116$, gross monthly income $\$ 2370$.
