**Assignment – Download the Spreadsheet application on Blackboard  
and follow the instructions below using the mortgage analytics. Type in the answers in a Word document (like 1a, 1b, 1c, 1d, 1e, 2a, 2b, …..)**

Make sure that the loan is set to $200,000, the interest rate is 4% fixed, term 30 years.

1. Task 1 - If you pay an extra $200 a month, and pay $1200 additional payment every December for the next 19 years … a) how much interest will you save, b) what date will the entire loan get paid , c) how much taxes will you save, d) what is the loan balance on year 15 ? e) how much was the total payment of the entire loan, f) how much was the total interest payment
2. Task 2 - If you pay an extra $150 a month and pay $500 additional payment every December for the next 20 years .. a) how much interest will you save, b) what date will the entire loan get paid , c) how much taxes will you save, d) what is the loan balance on year 10? e) how much was the total payment of the entire loan, f) how much was the total interest payment

Change the interest rate to 3.5% and also make this a variable rate with 7 years fixed interest. Variable rate ARM loans usually have lower interest rates, but after 7 years – assume the interest rate goes up by .25%

1. Task 3 - If you pay an extra $300 a month and pay $20,000 additional payment on the 85th month (or right after 7 years) .. a) how much interest will you save, b) what date will the entire loan get paid , c) how much taxes will you save, d) what is the loan balance on year 12 ? e) how much was the total payment of the entire loan, f) how much was the total interest payment
2. Task 4 - If you pay an extra $350 a month and pay $35,000 additional payment on the 85th month (or right after 7 years) .. a) how much interest will you save, b) what date will the entire loan get paid , c) how much taxes will you save, d) what is the loan balance on year 18 ? e) how much was the total payment of the entire loan, f) how much was the total interest payment

**The loan is set to $200,000, interest rate is 4% fixed, term 30 years**

**Extra $200 a month and pay $1200 additional payment every December for the next 19 years**

1a) how much interest will you save

57,388.32

1b) what date will the entire loan get paid

1/1/2037

1c) how much taxes will you save

21,588.00

1d) what is the loan balance on year 15

55,706.62

1e) how much was the total payment of the entire loan

286,351.11

1f) how much was the total interest payment

86,351.11

**Extra $150 a month and pay $500 additional payment every December for the next 20 years**

2a) how much interest will you save

43,332.09

2b) what date will the entire loan get paid

11/1/2039

2c) how much taxes will you save

25,102

2d) what is the loan balance on year 10

129,456.79

2e) how much was the total payment of the entire loan

300,407.34

2f) how much was the total interest payment

100,407.34

**The loan is set to $200,000, interest rate is 3.5% variable rate with 7 years fixed interest, term 30 years**

**Extra $300 a month and pay $20,000 additional payment on the 85th month**

3a) how much interest will you save

78,195.02

3b) what date will the entire loan get paid

4/1/2044

3c) how much taxes will you save

25,546

3d) what is the loan balance on year 12

86,255.11

3e) how much was the total payment of the entire loan

302,184.73

3f) how much was the total interest payment

102,184.73

**Extra $350 a month and pay $35,000 additional payment on the 85th month**

4a) how much interest will you save

99,082.86

4b) what date will the entire loan get paid

2/1/2041

4c) how much taxes will you save

20,324

4d) what is the loan balance on year 18

27,658.55

4e) how much was the total payment of the entire loan

281,296.89

4f) how much was the total interest payment

81,296.89