

i) Does your answer in part h) make sense? Why or why not?

j) Set up an equation with numbers that would have solved for how long it would take to pay off the loan this way (by paying \$600 each month over the entire life of the loan) if I didn't have the Excel chart to give me the answer, but **DO NOT SOLVE**.

PROBLEM 2):

a) If there are 500 different lottery tickets total, and you have purchased 2 of them, what is the probability you will win?

b) Discuss how the reward/risk ratio and probability relate in comparing real-life Powerball lotteries to the stock market.

c) How do chance and probability relate to financial forecasts?

d) Discuss how the debt-to-income ratio precipitated the 2008 recession?

e) What is a positive consequence of taking a periodic payout in the lottery?

f) Give enough information about the philosophy of derivation so that that someone could understand where the -1 came from in the periodic payment formula?