Applications worksheet: loan payments

You will find the information you need to do these problems in a handout entitled "Key Formulas and Examples for Finance".

1. Kelly wants to buy a car with a sticker price of $15,550. He intends to get a 5 year loan, and only plans to make the minimum payment. The dealer offers Kelly a 5.5% yearly interest rate with no money down, or a 4.25% interest rate if he can put $3000 down.

a. Calculate Kelly's minimum monthly payment if he takes the "no money down" option. How much will he actually pay over the course of the loan?

b. Calculate Kelly's minimum monthly payment if he decided to put the $3000 down and get the lower rate. How much will he actually pay over the course of the loan if he chooses this option? How much will this option save him (as opposed to the no money down option)? (Remember, the money he puts down is subtracted from the loan amount in calculating the monthly payment, but needs to be added in when figuring the total cost.)

2. Sandy is purchasing a home that costs $180,000. She is approved for a 30 year loan with a fixed yearly interest rate of 5.3%.

a. Calculate her minimum monthly payment. What will be the total cost over the course of her loan if she only makes the minimum payment each month?

b. Sandy pays $30/month to get her nails done. If she stops getting her nails done when she gets the house, and applies that money to her mortgage instead, how many payments house payments will she have to make? What will be the total cost over the course of her loan? How much money will she save over the course of the loan?