

A

Mr. and Mrs. Alan Bell obtain a 25-year, \$110,000 conventional mortgage at 10.5% on a house selling for \$160,000. Their monthly mortgage payment, including principal and interest is \$1038.40.

- a) Determine the total amount the Bells will pay for their house.
- b) How much of the cost will be interest?
- c) How much of the first payment on the mortgage is applied to the principal?

B

Kim invested a sum of money 4 years ago in a savings account that has since paid interest at the rate of 6.5% per year compounded monthly. Her investment is now worth \$19,440.31. How much did she originally invest?

C

Tim pays \$320 per month for 4 years for a car, making no down payment. If the loan borrowed costs 6% per year compounded monthly, what was the original cost of the car? How much interest will be paid?

D

Tom and Jerri paid \$10,000 down toward a new house. They also have a 30-year mortgage for which they pay \$1,100 per month. If interest is 6.35% per year compounded monthly, what did the house that they purchased originally cost?

E

James and Peter are the same age. From age 35 to 50, Peter deposits \$300 at the end of each month into a tax-free retirement account. Then he makes no withdrawals or further contributions. James does not begin making deposits into a retirement account until age 45. He then makes deposits of \$450 at the end of each month into the same type of account until age 60. Both accounts earn interest at the rate of 5.8% compounded monthly. At age 60, who ends up with the bigger nest egg?

F

Kelly wishes to buy a car that costs \$32,998. The car dealer tells her that they can finance the car at 6.25% per year compounded monthly for 5 years. She decides to secure the loan from the dealer. How much will her monthly payments be?

G

You plan on buying equipment worth \$30,000 in 3 years. Since you firmly believe in not borrowing, you plan on making monthly payments into an account that pays 4.00% compounded monthly. How much must your payment be?

An Individual Retirement Account (IRA) has \$20,000 in it and the owner decides not to add any more money to the account other than interest earned at 8% per year compounded monthly. How much will be in the account 35 years from now when the owner reaches retirement age?