

Question 1 2 3 4 5 6

Description

Section 5.4 - Amortized Loans

Instructions

Please work all homework questions and clearly label / place your answers in the boxes (or parenthesis) provided. If you have questions, please feel free to email me at Joshua.Patterson@tamuc.edu

1. Question Details

JMod7 5.4.001.CMI. [1639656]

The following loan is a simple interest amortized loan with monthly payments. (Round your answers to the nearest cent.)

\$5000, $9\frac{1}{2}\%$, 4 years

(a) Find the monthly payment.

\$

(b) Find the total interest.

\$

2. Question Details

JMod7 5.4.007.CMI. [1639337]

Wade Ellis buys a new car for **\$16,583.33**. He puts 10% down and obtains a simple interest amortized loan for the rest at $11\frac{1}{2}\%$ interest for four years. (Round your answers to the nearest cent.)

(a) Find his monthly payment.

\$

(b) Find the total interest.

\$

(c) Prepare an amortization schedule for the first two months of the loan.

Payment Number	Principal Portion	Interest Portion	Total Payment	Balance
0				\$ <input style="width: 60px;" type="text"/>
1	\$ <input style="width: 60px;" type="text"/>			
2	\$ <input style="width: 60px;" type="text"/>			

3. Question Details

JMod7 5.4.010. [1639450]

Shirley Trembley bought a house for **\$181,600**. She put 20% down and obtains a simple interest amortized loan for the rest at $6\frac{3}{8}\%$ for thirty years. (Round your answers to the nearest cent.)

(a) Find her monthly payment.

\$

(b) Find the total interest.

\$

(c) Prepare an amortization schedule for the first two months of the loan.

Payment Number	Principal Portion	Interest Portion	Total Payment	Balance
0				\$ <input type="text"/>
1	\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>
2	\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>

(d) Most lenders will approve a home loan only if the total of all the borrower's monthly payments, including the home loan payment, is no more than 38% of the borrower's monthly income. How much must Shirley make to qualify for the loan?

\$ per month

4. Question Details

JModd7 5.4.011. [1639310]

Dennis Lamenti wants to buy a new car that costs **\$15,861.26**. He has two possible loans in mind. One loan is through the car dealer; it is a four-year add-on interest loan at $7\frac{3}{4}\%$ and requires a down payment of \$1,000. The second is through his bank; it is a four-year simple interest amortized loan at $7\frac{3}{4}\%$ and requires a down payment of \$1,000. (Round your answers to the nearest cent.)

(a) Find the monthly payment for each loan.

dealer \$

bank \$

(b) Find the total interest paid for each loan.

dealer \$

bank \$

(c) Which loan should Dennis choose? Why?

- Dennis should choose the car dealer loan since the interest is less.
- Dennis should choose the bank loan since the interest is less.

5. Question Details

JModd7 5.4.015. [1639537]

Investigate the effect of the interest rate on home loans by finding the monthly payment and the total interest for a **thirty**-year simple interest amortized loan of **\$150,000** at the following rates. (Round your answers to the nearest cent.)

(a) 6%

payment \$

total interest \$

(b) 7%

payment \$

total interest \$

(c) 8%

payment \$

total interest \$

(d) 9%

payment \$

total interest \$

(e) 10%

payment \$

total interest \$

(f) 11%

payment \$

total interest \$

6. Question Details

JMod7 5.4.017. [1639344]

Some lenders offer loans with biweekly payments rather than monthly payments. Investigate the effect of this on home loans by finding the payment and total interest on a thirty-year simple interest amortized loan of \$150,000 at 13% interest. (Round your answers to the nearest cent.)

(a) if payments are made monthly

payment \$

total interest \$

(b) if payments are made biweekly

payment \$

total interest \$

Assignment Details