SECTIONS 8-4, 8-5 Installment Loans—Allocation of Monthly Payment and Paying Off

Part of each monthly payment is used to pay the interest on the unpaid balance of the loan and the remaining part is used to reduce the balance. To pay off a loan before the end of the term, you must pay the previous balance plus the current month’s interest.

Payment to Principal = Monthly Payment − Interest

New Principal = Previous Principal − Payment to Principal

Final Payment = Previous Balance + Current Month’s Interest

1. Ralph Phillips obtained a 12-month, $1,500 loan at 12 percent from his credit union. His monthly payment is $133.20. For the first payment:
   a. What is the interest?
   b. What is the payment to principal?
   c. What is the new balance?

2. Rita Rodriguez obtained a 24-month, $8,500 loan at 8 percent from Tri-County Savings & Loan. Her monthly payment is $384.20. For the first payment:
   a. What is the interest?
   b. What is the payment to principal?
   c. What is the new balance?

3. Complete the repayment schedule for a $2,400 loan at 12 percent for 6 months.

<table>
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<tr>
<th>Payment Number</th>
<th>Payment</th>
<th>Amount for Interest</th>
<th>Amount for Principal</th>
<th>New Principal</th>
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<tr>
<td>6</td>
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</table>

4. Patricia Nichols took out a $4,000 simple interest loan at 12 percent for 12 months. After 5 payments, the balance was $2,392.16. She pays off the loan when the next payment is due.
   a. What is the current month’s interest?
   b. What is the final payment?

5. Chad Roth took out a $9,100 simple interest loan at 10 percent for 36 months. After 27 payments the balance is $2,526.85. He pays off the loan when the next payment is due.
   a. What is the current month’s interest?
   b. What is the final payment?