Convert the interest rate from a decimal to a percent.

$r = 4.17101 \times 100$

$r \approx 417.1$

The annual interest rate is 417.1%.

a) Calculate the daily interest rate by dividing the annual interest rate by 365.

$r = 417.1 \div 365$

$r = 1.14$

The daily interest rate is 1.14%.

Example 2

Jean-Paul borrows $2500.00 to purchase a laptop computer and software. He takes out a personal loan from his credit union at an annual rate of 6.25% with an amortization period of 2 years. Use the personal loan payment calculator table on the next page to help you answer the questions below.

a) What is Jean-Paul's monthly payment?

b) Calculate the total amount he will pay over the 2 years.

c) Calculate the finance charge on the loan.

SOLUTION

a) Using the personal loan payment calculator table, first look up the interest rate of 6.25% in the left-hand column, then move across that row to the column showing the monthly payments for 2 years. The payment is $44.43 a month for a loan of $1000.00.

To calculate the monthly payment for a loan of $2500.00, divide the amount of the loan by $1000.00, then multiply by $44.43.

$\$2500.00 \div \$1000.00 \times \$44.43 \approx \$111.08$

Jean-Paul's monthly payment is approximately $111.08.

b) He will pay $111.08 a month for 2 years, or 24 months.

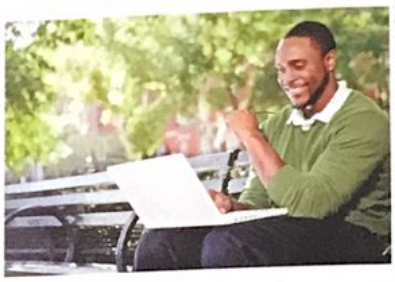
$\$111.08 \times 24 \text{ months} = \$2665.92$

Jean-Paul will pay a total of $2665.92 over the 2 years.

c) The finance charge is the difference between the amount borrowed and the total amount to be repaid.

$\$2665.92 - \$2500.00 = \$165.92$

The finance charge on the loan will be $165.92.



A personal loan is one way to finance buying a computer.