

Credit Cost Check

Find the finance charge, then find the total amount due.

HIGH SCHOOL • MA.912.FL.3.6

MA.912.FL.3.6 "Calculate the finance charges and total amount due on a bill using various forms of credit using estimation, spreadsheets and other technology."

NAME _____

DATE _____

ADD THE COST OF CREDIT

For a monthly credit charge, multiply the balance by the monthly rate written as a decimal. For simple interest, use $\text{finance charge} = \text{principal} \times \text{annual rate} \times \text{time in years}$, then add the charge to the original amount.

WORKED EXAMPLE

A credit card balance is \$350, and the monthly finance rate is 1.2%. Find the finance charge and total amount due.

1. Convert the rate: $1.2\% = 0.012$.
2. Find the finance charge: $350 \times 0.012 = 4.20$.
3. Add the charge: $350 + 4.20 = 354.20$.

Answer: Finance charge: \$4.20; total amount due: \$354.20

PRACTICE 6 problems

- 1** A credit card has a balance of \$240 and a monthly finance rate of 1.5%. Find the finance charge and total amount due.

ANSWER _____

- 2** A store card has a balance of \$180 and charges 2% for the month. Find the finance charge and total amount due.

ANSWER _____

- 3** A one-year personal loan is for \$600 at 5% simple interest. Find the finance charge and total amount due.

ANSWER _____

- 4** A borrower uses \$800 in credit for 6 months at 6% annual simple interest. Find the finance charge and total amount due.

ANSWER _____

- 5** A short-term cash advance is \$300. The lender charges a finance fee of \$12 for each \$100 borrowed. Find the finance charge and total amount due.

ANSWER _____

- 6** A furniture store offers a \$900 purchase on credit at 8% annual add-on interest for 9 months. Find the finance charge and total amount due.

ANSWER _____

APPLY IT Show your work

- 1** Kai buys concert tickets with a credit card. The new balance for this billing cycle is \$480, and the card charges 1.25% for the month. What finance charge will Kai pay if no payment is made before the bill is due? What is the total amount due?

WORK SPACE

ANSWER _____

- 2** Maya finances a laptop for \$1,200 through a one-year loan. The loan uses 7.5% annual simple interest, but Maya plans to pay it off after 8 months. Find the finance charge and the total amount Maya must pay.

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

A credit card starts with a \$400 balance and charges 2% each month. No payments or new purchases are made for 3 months. Each month's finance charge is added to the balance before the next month's charge is found. Round each monthly finance charge to the nearest cent. Find the finance charge for each month, the total finance charges, and the balance after 3 months.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	A credit card has a balance of \$240 and a monthly finance rate of 1.5%. Find the finance charge and total amount due.	Finance charge: \$3.60; total amount due: \$243.60
2	A store card has a balance of \$180 and charges 2% for the month. Find the finance charge and total amount due.	Finance charge: \$3.60; total amount due: \$183.60
3	A one-year personal loan is for \$600 at 5% simple interest. Find the finance charge and total amount due.	Finance charge: \$30; total amount due: \$630
4	A borrower uses \$800 in credit for 6 months at 6% annual simple interest. Find the finance charge and total amount due.	Finance charge: \$24; total amount due: \$824
5	A short-term cash advance is \$300. The lender charges a finance fee of \$12 for each \$100 borrowed. Find the finance charge and total amount due.	Finance charge: \$36; total amount due: \$336
6	A furniture store offers a \$900 purchase on credit at 8% annual add-on interest for 9 months. Find the finance charge and total amount due.	Finance charge: \$54; total amount due: \$954

PART 2 • APPLY IT

- Finance charge: \$6; total amount due: \$486** Convert 1.25% to 0.0125 and multiply $480 \times 0.0125 = 6$. Add \$6 to the \$480 balance.
- Finance charge: \$60; total amount due: \$1,260** Use time $8/12$ year: $1,200 \times 0.075 \times 8/12 = 60$. Add the \$60 finance charge to the principal.

CHALLENGE

Month 1: \$8.00; Month 2: \$8.16; Month 3: \$8.32; total finance charges: \$24.48; balance after 3 months: \$424.48

Accept equivalent money notation, such as \$30.00 for \$30. For the challenge, accept only answers that round each monthly finance charge to the nearest cent before calculating the next month's balance.