

Calculating Interest

Directions:

Read the following questions and calculate the interest.

1. Mark wants to borrow \$1,000 to purchase a nice bicycle. The local bank provides him with a loan with an annual interest rate of 10 percent. How much interest should Mark pay after one year?

$$\text{\$1,000} \times 10\% = \text{\$100}$$

2. Mark decided to borrow the \$1,000 for two years. If the bank charges 10 percent simple interest, how much interest would Mark pay?

$$\text{\$1,000} \times 10\% \times 2 = \text{\$200}$$

3. If Mark wants to pay off the loan in five years and the bank charges 10 percent simple interest, how much would Mark pay for the entire loan?

$$\text{Interest} = \text{\$1,000} \times 10\% \times 5 = \text{\$500}$$

$$\text{Principle} + \text{Interest} = \text{\$1,000} + \text{\$500} = \text{\$1,500}$$

4. Julie borrows the same \$1,000 for her furniture. However, the bank she went to charges a compound interest of 10 percent. If Julie's loan will be paid off in two years, how much will Julie pay the bank in total?

Year	Loan at Start	Interest	Loan at End
0 (Now)	\$1,000.00	$(\$1,000.00 \times 10\% =) \100.00	\$1,100.00
1	\$1,100.00	$(\$1,100.00 \times 10\% =) \110.00	\$1,210.00

5. If Julie's \$1,000 loan is paid off in five years, how much will Julie pay the bank in total?

Year	Loan at Start	Interest	Loan at End
0 (Now)	\$1,000.00	$(\$1,000.00 \times 10\% =) \100.00	\$1,100.00
1	\$1,100.00	$(\$1,100.00 \times 10\% =) \110.00	\$1,210.00
2	\$1,210.00	$(\$1,210.00 \times 10\% =) \121.00	\$1,331.00
3	\$1,331.00	$(\$1,331.00 \times 10\% =) \133.10	\$1,464.10
4	\$1,464.10	$(\$1,464.10 \times 10\% =) \146.41	\$1,610.51