

Simple Interest

Simple Interest - Interest earned or paid on the original sum of money invested or borrowed.

Principal – A sum of money that is borrowed or invested.

Rate – The interest rate at which the money is invested.

Interest – The money earned from an investment or the cost of borrowing money.

Amount – The total value of an investment or loan.

Equations

Simple Interest

$$I = Prt$$

Total Amount

$$A = P(1 + rt)$$

OR

$$A = P + Prt$$

Examples

1. How much interest would be earned on a principal of \$5000 invested at 4.5% simple interest over a period of 15 years?

2. What would be the total value of a \$10,000 initial investment that earned 3.25% simple interest for 5 years?

3. You borrow \$540 for 85 days by taking a cash advance on your credit card. The interest rate is 26% simple interest.
 - a. How much will you need to pay back at the end of the loan period?

 - b. How much interest will you have paid?

4. You invest \$4850 at 7.6% simple interest. If you want the money to increase to \$8000, how long will you need to leave the money invested?