M9

Simple Interest

8.7

$$I = prt$$

I =

p =

r =

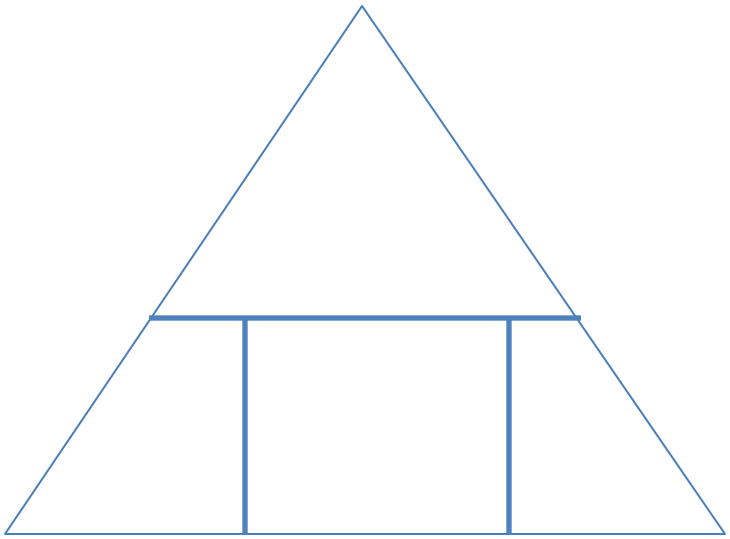
t =

Final Amount = Interest + Principle

Example: Determine the amount of simple interest charged and the total amount to be paid at the end of the loan period.

- Amount borrowed: $ 3000.00
- Annual interest rate: 9.5%
- Length of borrowing period: 3.5 years

Solving for different quantities using the simple interest formula:



Examples:

A) Kate deposited $1200.00 into her bank account. After 3 years, her bank account balance was $1362.00. What interest did she earn? What is the annual interest rate on her account?

B) How long does it take to triple the investment of $2800.00 deposited in an account earning an interest rate of 6.8% ?

C) 18 months after Bob borrowed $5000.00 from a bank, he wanted to pay off his loan. How much does he owe if he was charged an annual interest rate of 5.8%?