Foundations of Math 12 Section 1.1

Simple Interest

Simple Interest is The amount of interest earned on an investment or paid on a loan

Based on a the original amount (principal) and the simple interest rate.

With a partner, work through "Investigate the Math" on page 6.

Ex.1: Matty invested in a \$2500 guaranteed investment certificate (GIC) at 2.5% simple interest, paind annually, with a term of 10 years.

a) How much interest will accumulate over the term of Matty's investment?

b) What is the future value of his investment at maturity?

c) Use Matty's investment to write an Algebraic expression that could be used to determine the future value of any investment earning simple interest.

A= D + Prt A= D + T

Ex. 2: Sunni invested \$15 000in a savings account. Sunni earned a simple interest rate of 8%, pain semiannually on her investment. She intends to hold the investment for 4.5 years, when she will withdraw all the money to buy a car. Determine the value of the investment at each half year until she withdraws the

Principal - \$15000

Interest - 8% = 0.08

4 semi -annually

Term → 4.5 yrs.

Lo time = 9

A=P+Pct

= 15000 + 15000 (0.08) (4.5)

= 15000 + 5400

A = 20400

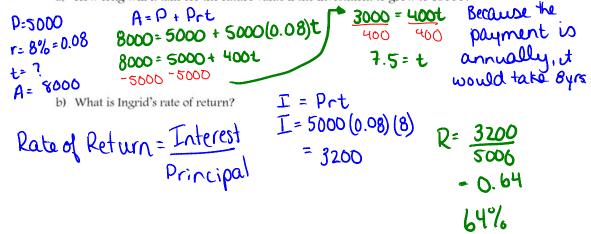
Interest = Interest = 5400 earned bmonths #of payments 9

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HW: 1-3 (A, B) 4,5

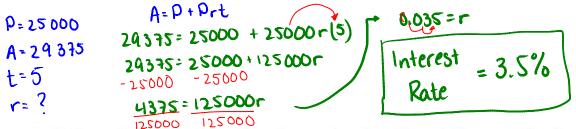
Ex. 3: Ingrid invested her summer earnings of \$5000 at 8% simple interest, paid annually. She intends to use the money in a few years to take a holiday with a girlfriend.

a) How long will it take for the future value if the investment to grow to \$8000?

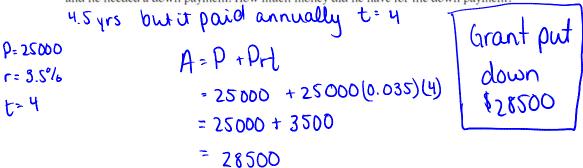


Ex. 4: Grant invested \$25,000 in a simple interest Canada Savings Bond (CSB) that paid interest annually.

a) If the future value of the CSB is \$29 375 at the end of 5 years, what interest rate does the CSB earn?



b) Grant cashed in the bond after 4.5 years because a house he had been admiring came up for sale and he needed a down payment. How much money did he have for the down payment?



HW: PAGE 14 - 17 QUESTIONS 1 - 3(A, B), 4 - 12 (EVEN NUMBERS ONLY)