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.

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

Amount - The total value of an investment or loan.

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

Example: How much interest would be earned on a principal of $P invested at r% simple interest over a period of t years?

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

Example: What would be the total value of a $P initial investment that earned r% simple interest for t years?

Compound Interest

Compound Interest - Interest that is added to the principal *before* new interest earned is calculated. So interest is calculated on the principal *and* on interest already earned. Interest is paid at regular time intervals called the **compounding period**.

Compounding Period - The intervals at which interest is calculated; for example,

annually	1 time per year
semi-annually	2 times per year
quarterly	4 times per year
monthly	12 times per year

Example: What would be the total value of a $10,000 initial investment that earned 3.25% **compound** interest for 5 years?

Example: What would be the total value of a $P initial investment that earned i% **compound** interest for n years?

Example: You decide to invest $5,000 for 3.5 years at 2.5% interest compounded monthly. What is the total final value of your investment?