



Vocabulary: Compound Interest



Vocabulary

- Annual percentage yield (APY) – the actual rate earned or paid in one year, considering the effect of compounding interest.
- Compound interest – interest paid on the principal plus the interest earned in previous periods of a deposit or loan.
 - For compound interest, the balance B is given by the formula $B = P\left(1 + \frac{r}{n}\right)^{nt}$, where P is the principal, r is the interest rate, n is the number of times interest is compounded per year, and t is the number of years.
 - When interest is compounded continuously (when n goes to infinity), then the balance B is given by the formula $B = P \cdot e^{rt}$.
- Exponential function – a function of the form $y = a \cdot b^{kx}$, where $a \neq 0$, $b > 0$, and $b \neq 1$.
 - The formula for compounded interest is an exponential function.
- Interest – the amount charged for borrowing money, or paid on invested money.
- Interest rate – the percent of interest paid on a deposit or charged on a loan.
- Principal – the amount of money initially deposited or borrowed.

