

Finance Formulas

Compound Interest Formulas

Interest Compounded n Times per Year

Interest Compounded Continuously

$$A = P \left(1 + \frac{\text{APR}}{n} \right)^{(nY)}$$

$$A = Pe^{(\text{APR} \times Y)}$$

Savings Plan Formulas (Regular Payments)

$$A = \text{PMT} \times \frac{\left[\left(1 + \frac{\text{APR}}{n} \right)^{(nY)} - 1 \right]}{\left(\frac{\text{APR}}{n} \right)}$$

$$\text{PMT} = A \times \frac{\left(\frac{\text{APR}}{n} \right)}{\left[\left(1 + \frac{\text{APR}}{n} \right)^{(nY)} - 1 \right]}$$

Loan Payment Formula (Installment Loans)

$$\text{PMT} = P \times \frac{\left(\frac{\text{APR}}{n} \right)}{\left[1 - \left(1 + \frac{\text{APR}}{n} \right)^{(-nY)} \right]}$$

Current Yield of a Bond

$$\text{current yield} = \frac{\text{annual interest payment}}{\text{current price of the bond}}$$