Basic formulas

Simple interest:

$$FV = PV * (1 + r * t)$$

(Only) Interest:

$$I = PV * r * t$$

Compound interest:

$$FV = PV * (1 + r)^t$$

Combined interest:

$$FV = PV * (1 + r)^n * (1 + r * t)$$

, where $n \in Z \wedge \text{t} < 1 Interestperiod; T \in n + t$

Effective interest rate:

$$r_e = (1 + \frac{r}{m})^m - 1$$

... where r ... nominal interest rate and m ... number of conversions (number of Interest periods)

Anticipated interest:

$$PV = FV * (1 - d * t)$$

i.e. ... ahead paid interest, and d ... discount rate.

Commercial discount:

$$D = FV * d * t$$

Worth noting:

$FV = PV + I$ vs. $PV = FV - D$