PORTFOLIO MANAGEMENT	Utility of the Investment (U)	$U_p = E(R_p) - \lambda\sigma_p^2$	U_p – Expected return of the portfolio $E(R_p)$ – Expected return of the portfolio λ – Measure of the investor's risk aversion σ_p – Standard deviation of returns of the portfolio
	Expected Return of a Portfolio of Two Assets, One of which is Risk-free Asset	$E(R_p) = w_1R_f + (1 - w_1)E(R_i)$	$E(R_p)$ – Portfolio expected return R_f – Return from risk-free asset $E(R_i)$ – Expected return from the risky asset. w_1 – Weight in the risk-free asset $1 - w_1$ – Weight in the risky asset

	Variance of a Portfolio of Two Assets, One of which is Risk-free Asset	$\sigma_p = (1 - w_1)^2\sigma_i^2$	σ_p – Portfolio variance. $1 - w_1$ – Weight in the risky asset σ_i^2 – Variance of the risky asset.
	Expected Return of a Portfolio of Two Risky Assets	$E(R_p) = w_1R_1 + (1 - w_1)R_2$	$E(R_p)$ – Portfolio expected return w_1 – Weight in the risk-free asset $1 - w_1$ – Weight in the risky asset

	Equation of Capital Allocation Line (CAL)	$E(R_p) = R_f + \left(\frac{(E(R_i) - R_f)}{\sigma_i}\right)\sigma_P$	$E(R_p)$ – Portfolio expected return R_f – Return from risk-free asset $E(R_i)$ – Expected return from the risky asset. σ_p – Portfolio variance. σ_i – Standard deviation of the risky asset. σ_p – Portfolio variance.

	Variance and Standard deviation of a Portfolio of Two Risky Assets	Variance: $\sigma_p^2 = w_1^2\sigma_1^2 + w_2^2\sigma_2^2 + 2w_1w_2\mathrm{Cov}(R_1, R_2)$ $= w_1^2\sigma_1^2 + w_2^2\sigma_2^2 + 2w_1w_2\rho_{12}\sigma_1\sigma_2$ Standard Deviation: $\sigma_p = \sqrt{\sigma_p^2}$	
	Covariance between Returns of Assets 1 and 2	$\mathrm{Cov}(R_1, R_2) = \rho_{12}\sigma_1\sigma_2$	$\mathrm{Cov}(R_1, R_2)$ – Covariance between the returns of Asset 1 and Asset 2. ρ_{12}– Correlation coefficient between Asset 1 and Asset 2. σ_1 – Standard deviation of returns for Asset 1. σ_2 – Standard deviation of returns for Asset 2.
	Variance of Portfolio with many Risky Assets Assuming Equal Weighting	$\sigma_P^2 = \frac{\bar{\sigma}^2}{N} + \frac{(N-1)}{N}\overline{\mathrm{Cov}}$	σ_P^2 – Variance of portfolio with many risky assets. N – Number of Assets. $\bar{\sigma}^2$ – Average variance. $\overline{\mathrm{Cov}}$ – Average covariance.
	Equation of the Capital Market Line (CML)	$E(R_P) = R_f + \left(\frac{E(R_m) - R_f}{\sigma_m}\right) \times \sigma_p$	$E(R_P)$ – Expected return of the portfolio. R_f – Risk-free rate. $E(R_m)$ – Expected return of the market portfolio. σ_m – Standard deviation of the market's return. σ_p – Standard deviation of the portfolio's returns

	Beta of an Asset	$$\beta_i = \frac{Cov(R_i, R_m)}{\sigma_m^2} = \frac{\rho_{i,m}\sigma_i\sigma_m}{\sigma_m^2} = \frac{\rho_{i,m}\sigma_i}{\sigma_m}$$	β_i – Beta coefficient of the asset. $Cov(R_i, R_m)$ – Covariance between the returns of the asset and the returns of the market. σ_m^2– Variance of the market's returns (R_m). $\rho_{i,m}$– Correlation coefficient between the returns of the asset R_i and returns of the market R_m. σ_i – Standard deviation (volatility) of the returns of the asset.
	Capital Asset Pricing Model (CAPM)	$$E(R_i) = R_f + \beta_i[E(R_m) - R_f]$$	$E(R_i)$ – Expected return on a specific asset. R_f – Risk-free rate. β_i – Beta coefficient of the asset. $E(R_m)$ – Expected return on the overall market.
	Sharpe Ratio	$$SR = \frac{E(R_p) - R_f}{\sigma_p}$$	$E(R_p)$– Expected return of the portfolio R_f – Risk– free rate of interest σ_p – Return volatility (standard deviation of returns) of the portfolio