EQUITY INVESTMENTS	Value of a Price Return Index	$V_{PRI} = \frac{\sum_{i=1}^{N} n_i P_i}{D}$	V_{PRI} – Value of a price index return n_i – Number of units of constituent security i in index portfolio N – Number of constituent securities in index P_i – Unit price of constituent security D – Value of the divisor
	Price Return of an Index (PR_I)	$PR_I = \frac{V_{PRI1} - V_{PRI0}}{V_{PRI0}}$	V_{PRI1} – Value of the price return index at end of period V_{PRI0} – Value of the price return index at the beginning of period
	Price Return of Each Constituent Security	$PR_i = \frac{P_{i1} - P_{i0}}{P_{i0}}$	PR_i – Price return of constituent security i (as a decimal number) P_{i1} – Price of constituent security i at the end of the period P_{i0} – Price of constituent security i at the beginning of the period
	Price Weighting	$w_i^p = \frac{P_i}{\sum_{i=1}^{N} P_i}$	P_i- Price of constituent security $\sum_{i=1}^{N} P_i$ – Sum of all the prices of the constituent securities.

	Price Return of an Index in the Index	$PR_I = \sum_{i=1}^{N} w_i PR_i = \sum_{i=1}^{N} w_i \left(\frac{P_{i1} - P_{i0}}{P_{i0}}\right)$	PR_I – Price return of index portfolio (as a decimal number) w_i – Weight of security i (the fraction of the index portfolio allocated to security i) N – Number of securities in the index
	Total Return of an Index (TR_I)	$TR_I = \frac{V_{PRI1} - V_{PRI0} + Inc_I}{V_{PRI0}}$	V_{PRI1} – Value of the price return index at the end of the project V_{PRI0} - Value of the price return index at the beginning of the project Inc_I – Total income from all securities in the index held over the period
	Total Return of Each Constituent Security in the Index	$TR_i = \frac{P_{i1} - P_{i0} + Inc_i}{P_{i0}}$	TR_i – Total return of constituent security i (as a decimal number) P_{i1} – Price of constituent security i at the end of the period P_{i0} – Price of constituent security i at the beginning of the period Inc_i – Total income (dividends and/or interest) from security i over the period

	Total Return of the Index Portfolio	$TR_I = \sum_{i=1}^{N} w_i TR_i = \sum_{i=1}^{N} w_i \left(\frac{P_{i1} - P_{i0} + Inc_i}{P_{i0}}\right)$	TR_i – Total return of constituent security i (as a decimal number) P_{i1} – Price of constituent security i at the end of the period P_{i0} – Price of constituent security i at the beginning of the period Inc_i – Total income (dividends and/or interest) from security i over the period N – Number of securities in the index w_i – Weight of security i (the fraction of the index portfolio allocated to security i)
	Calculation of Price Return Index Values Over Multiple Time Periods	$V_{PRIT} = V_{PRI0}(1 + PR_{I1})(1 + PR_{I2}) \dots (1 + PR_{IT})$	V_{PRI0} – Value of the price return index at inception. V_{PRIT} – Value of the price return index at time t PR_{IT} – Price return (as a decimal number) on the index over period t, t = 1, 2, …, T
	Calculation of Total Return Index Values Over Multiple Time Periods	$V_{PRIT} = V_{PRI0}(1 + TR_{I1})(1 + TR_{I2}) \dots (1 + TR_{IT})$	V_{PRI0} – Value of the total return index at inception. V_{PRIT} – Value of the total return index at time t TR_{IT} – Total return (as a decimal number) on the index over period t, t = 1, 2, …, T
	Equal Weighting	$w_i^E = \frac{1}{N}$	w_i – Weight of security i N – Number of securities in the index

	Market Capitalization Weighting	$w_i^M = \frac{Q_i P_i}{\sum_{j=1}^{N} Q_j P_j}$	w_i – Weight of security i Q_i– Number of shares outstanding of security i P_i– Share price of security i N – Number of securities in index
	Float-adjusted Market Capitalization	$w_i^M = \frac{f_i Q_i P_i}{\sum_{j=1}^{N} f_i Q_i P_i}$	f_i– Fraction of shares outstanding in the market float w_i – Weight of security i Q_i – Number of shares outstanding of security i P_i – Share price of security i N – Number of securities in index
	Fundamental weighting	$w_i^F = \frac{F_i}{\sum_{j=1}^{N} F_j}$	F_i – Fundamental size measure of company i.
	Return on Equity (ROE)	$ROE_t = \frac{NI_t}{\text{Average } BVE_t} = \frac{NI_t}{(BVE_t + BVE_{t-1})/2}$	NI – Net income BVE – Book value of equity
	Herfindahl-Hirschman Index (HHI)	$HHI = \sum_{i=1}^{\infty} s_i^2$	s – Market share of market participant stated as a whole number
	Price– to– book ratio	$\text{Price to book ration} = \frac{\text{Market price per share}}{\text{BV per share}}$	BV – Book value of equity/share $BV = \frac{\text{Shareholder's equity}}{\text{Shares Outstanding}}$

	Price– to– sales ratio	$\text{Price to sales ratio} = \frac{\text{Market price per share}}{\text{Sales per share}}$	
	Price– to– cash– flow ratio	$\text{Price to cash flow ratio} = \frac{\text{Market price per share}}{\text{Cash flow per share}}$	
	Price– to– earnings ratio (Trailing)	$\text{Price to earnings ratio (Trailing)} = \frac{\text{Market price per share}}{\text{EPS previous 12 months}}$	EPS – Earnings Per Share
	Price– to– earnings ratio (Forward)	$\text{Price to earnings ratio (Forward)} = \frac{\text{Market price per share}}{\text{EPS forecast for 12 months}}$	EPS – Earnings Per Share
	One– Period DDM	$P_o = \frac{D_1}{1+r} + \frac{P_1}{(1+r)^2}$	D_1 – Dividend one period ahead P_1 – Price at the end of year 1 (Terminal Value)
	Intrinsic Value of a Share (Assuming Constant Required Rate of Return and Company being Going Concern)	$V_0 = \sum_{t=1}^{\infty} \frac{D_t}{(1+r)^t}$	V_0 – Value of a share of stock today, at t = 0 D_t – expected dividend in year t, assumed to be paid at the end of the year r – Required rate of return on the stock
	DDM for Pricing Share for n-holding Periods	$V_0 = \frac{D_1}{1+r} + \frac{D_2}{(1+r)^2} + \cdots \frac{D_n}{(1+r)^n} + \frac{P_n}{(1+r)^n}$ $= \sum_{t=1}^{n} \frac{D_t}{(1+r)^t} + \frac{P_n}{(1+r)^n}$	D_{n+1}– Dividends in year n+1 g_s – growth rate (short term) P_n – Price at $t = n$ (Terminal Value)

	Value of non-callable, non-convertible perpetual preferred share paying a level dividend D and assuming a constant required rate of return over time	$V_0 = \frac{D_0}{r}$	V_0 – Current value or price of the preferred share. D_0 – Current dividend per period. r – Required rate of return on the stock
	Intrinsic Value of Non-callable, Non-Convertible Preferred Stock with Maturity at time n.	$V_0 = \sum_{t=1}^{n} \frac{D_t}{(1+r)^t} + \frac{F}{(1+r)^n}$	
	Value of Company's Equity using FCFE	$V_0 = \sum_{t=1}^{\infty} \frac{FCFE_t}{(1+r)^t}$	FCFE – Free Cash Flow to Equity r – Required rate of return
	Gordon (Constant) Growth Model	$V_0 = \frac{D_1}{r-g}$	D_1– Dividends at time 1 r – Required rate of return g – Constant growth rate

	Multistage GGM	Where: $V_o = \frac{D_1}{1+r} + \frac{D_2}{(1+r)^2} + \cdots \frac{D_n}{(1+r)^n} + \frac{V_n}{(1+r)^n}$ $= \sum_{t=1}^{n} \frac{D_0(1+g_S)^t}{(1+r)^t} + \frac{V_n}{(1+r)^n}$ $V_n = \frac{D_{n+1}}{r-g_L}$ $D_{n+1} = D_o(1+g_S)^n(1+g_L)$	D_{n+1}– Dividends in year n+1 g_S – Growth rate (short– term) g_L – Growth rate (long– term) V_n– Intrinsic value per share in year n D_o – Current dividend/Historical dividend VALUE
	Justified Forward P/E ratio	$\frac{P_0}{E_1} = \frac{\text{Expected DPS}}{r-g} = \frac{D_1/E_1}{r-g} = \frac{p}{r-g}$	Expected DPS – Expected dividends per share g – Sustainable growth rate r– Required rate of return D_1 – Expected dividends E_1 – Expected earnings p – dividend payout ratio
	Sustainable Growth Rate	$g = b \times ROE$	g – Growth Rate b – Retention Rate ROE – Return on Equity
	Enterprise Value (EV)	$EV = \text{MV of common stock} + \text{MV of debt} - \text{Cash and short term investements}$	EV – Enterprise Value MV – Market Value
	Periodic Payment (A) of Fully Amortizing Loan	$A = \frac{r \times \text{Principal}}{1-(1+r)^{-N}}$	r – Market interest rate per period A – Periodic payment amount N – Number of payment periods Principal – Principal amount