LESSON 6

ABSOLUTE RETURN:

Formula:
Absolute Return: (Selling Price / End Value – Cost Price) X 100
                          Cost Price

Example: Amit purchased Reliance Industries shares for Rs. 503 in 2016 and sold them for Rs. 721 in 2017, calculate the
Absolute Return: ((721 – 503) / 503) X 100 = 30.24 %

ANNUALISED RETURN:

Formula:
Annualised Return:
(Selling Price / End Value – Cost Price) × 100 x   1 / holding period in years
            Cost Price

Example 1: Dr. Gupta purchased a flat for Rs. 12.5 lakhs and sold it after 2.5 years for 10 Lakhs, calculate the Annualised Return.
Annualised Return: ((10 – 12.5) / 12.5) X 100 X 1 / 2.5 = - 8 % p.a

Example 2: Deepak had invested Rs.10,000 in an 9 month bank deposit. At maturity he received an amount of 10,800, calculate the Annualised Return.
Annualised Return: ((10,800 – 10,000) / 10,000) X 100 X 12/9 = 10.67 % p.a

TOTAL RETURNS:

Example:

Dr. Gupta purchased a flat for Rs. 12.5 lakhs and sold it after 2.5 years for 10 Lakhs, he also earned monthly rental of Rs. 5000 on the flat. Calculate the Total Return.

Total Return over 2.5 years : ((10 – 12.5) + (.05 x18) / 12.5) X 100 = -12.80%

Total Return annualised: -12.80 % x 1/2.5 = -5.12 % p.a

CAGR:

Formula:

$r = ((FV / PV) \char94 (1/n)) - 1$

for % multiply by 100

Example:

Amit invested Rs. 100 in a stock and sold it after 5 years for Rs. 200. Calculate the compounded rate of return

$r = ((200/100) \char94 (1/5)) - 1$ (this can be entered in Formula Bar in EXCEL)

r = 0.1486 = 14.86%

HOLDING PERIOD RETURN :

Formula:

Holding Period Return =
(Cash Inflows + Capital Gains during the period)/ Beginning Value of the
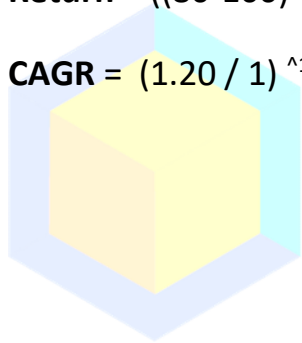investment
{Provides simple absolute return, for greater than 1 year, CAGR has to be
calculated.}

Example:

Mr. Investor invested Rs. 100 in a stock and sold it after 2 years for Rs. 80, he
also earned dividend income of Rs. 40 . Calculate the Holding period return

Return = ((80-100) + 40) / 100 x 100 = 20%

CAGR = $(1.20 / 1)^{1/2}$ - 1 = 0.095 or 9.5 % p.a

REAL RETURN CALCULATION:

Formula:

Real Return = ((1+Nominal Return)/(1+Inflation))-1

Example:

A fixed deposit pays 12 % interest per annum. Inflation rate is 6%. Calculate the
real rate of return.

Nominal rate of return = 12% & Inflation = 6 %

Real Return: (1.12 / 1.06) -1 = .0566 or 5.66%

TAX ADJUSTED RETURNS:

Example:

Dr. Bansal has made a 1 year fixed deposit for 20,000 which earns 12 % interest per annum. If interest is taxed at 30% calculate tax adjusted return.

Tax adjusted return = Nominal Return (1-Tax rate) =

12% x (1 – 30%) = 0.12 x (1-.30) = 0.12 x 0.70 = 0.084 = 8.4%.