# Finance formula sheet 

Finance

A Growing Perpetuity (Gordon model): If the first period's cash flow is $\$ \mathrm{RMI}$ at year 1 and if cash flows thereafter grow at a constant rate of $g$ in perpetuity: A Growing Annuity: The formula for an annuity discounted at an annual rate (I) and where cash flows are growing at an annual rate $(\mathrm{g})$ is as follows: An $=$ 1- $\{(I+g) n /(I+I) n\} x(I+g)$ Continuous Compounding/Discounting: If ' $r$ ' is the continuously compounded rate of interest, the present value of \$RMI received in year t' is: Capital Asset Pricing Model (CAMP): The expected risk premium on a risky investment is: $r$ - ref $=u(a r m-r e f)$

Bond Duration and Volatility: Duration of T-period Volatility (modified duration) $=$ Duration/(I Weighted Average Cost of Capital: WAC $=$ rd(1-+ $r e(E / V)+R P R(P A N)$ where: $r d=$ expected return on debt, $D$. re and $R P R=$ expected return on equity, E , and preferred equity, P .

