Annuity Formulae



 Annuity: A level stream of cash flows that last for a fixed number of periods

• PV of an annuity:
$$PV = C \left[\frac{1}{r} - \frac{1}{r(1+r)^T} \right] = C \left[\frac{1 - \frac{1}{(1+r)^T}}{r} \right]$$

 $\$ The term in brackets is called the annuity factor, A_r^T

• PV of a growing annuity: $PV = C \left| \frac{1 - \left(\frac{1+g}{1+r}\right)^T}{r - g} \right|$