9.4 Annuity Formulae 2

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Things δ can represent:
1) Interest i $\quad \delta = 1/(1+i)$
2) Time value of money
3) Real interest rate r $\quad \delta = 1/(1+r)$
4) Inflation m $\quad \delta = 1/(1+m)$
5) depreciation d $\quad \delta = 1-d$
6) obsolescence f $\quad \delta = 1-f$
7) growth g $\quad \delta = 1+g \rightarrow$ A?

Combinations:
- obsolescence + discounting $\quad \delta = 1-f/1+i$
- obs, tvm, depr $\quad \delta = [(1-f)(1-d)]/(1+r)$

$S = A\delta + A\delta^2 + \dots A\delta^T$

↳ $A_1 + A_1(1+g)^1 + A_1(1+g)^2$

↳ $A_0(1+g) = A_1 \rightarrow A_0 = A_1/(1+g)$

↳ $S = A_0(1+g) + A_0(1+g)^2 + \dots A_0(1+g)^T$

↳ $S = [\delta(1-\delta)(1-\delta^T)] \cdot A_0$