For example:

Set out the premium formula for a whole life assurance for a sum assured of £10,000 to a life aged 40 subject to the following expenses:

£100 to establish the policy
30% of the premium as commission at commencement
1.5% of the premium as renewal commission (after first year)
£10 per annum maintenance expenses (after first year)

Let premium be P

$P.\ddot{a}_{40} = 100 + 10000\ A_{40} + .3\ P + .015Pa_{40} + 10\ a_{40}$

$P = (100 + 10000\ A_{40} + 10\ a_{40})/(\ddot{a}_{40} - .3 - .015\ a_{40})$

If the maintenance expenses were assumed to increase with inflation at rate e, then the $10\ a_{40}$ item would be calculated at rate j where:

$1+j = (1+i)/(1+e)$ in the same way as the compound interest examples last term.