

### Example

- (a) An annuity of £500 per annum is to be paid annually in arrears from age 70 to a life currently age 60. Level annual premiums are payable throughout the deferred period.

Basis: Mortality: a(55) females ~~ultimate~~ *ultimate*  
Interest: 8%p.a..

- (i) Find the net premium.
- (ii) What is the probability that the office makes a profit on the contract (ignoring expenses), given the premium assumptions.