

186. For a group of 250 individuals age x , you are given:

- (i) The future lifetimes are independent.
- (ii) Each individual is paid 500 at the beginning of each year, if living.
- (iii) $A_x = 0.369131$
- (iv) ${}^2A_x = 0.1774113$
- (v) $i = 0.06$

Using the normal approximation, calculate the size of the fund needed at inception in order to be 90% certain of having enough money to pay the life annuities.

- (A) 1.43 million
- (B) 1.53 million
- (C) 1.63 million
- (D) 1.73 million
- (E) 1.83 million