

209. For a pension plan portfolio, you are given:

- (i) 80 individuals with mutually independent future lifetimes are each to receive a whole life annuity-due.
- (ii) $i = 0.06$
- (iii)

Age	Number of annuitants	Annual annuity payment	\ddot{a}_x	A_x	2A_x
65	50	2	9.8969	0.43980	0.23603
75	30	1	7.2170	0.59149	0.38681

- (iv) X is the random variable for the present value of total payments to the 80 annuitants.

Using the normal approximation, calculate the 95th percentile of the distribution of X .

- (A) 1220
- (B) 1239
- (C) 1258
- (D) 1277
- (E) 1296