25. Your company currently offers a whole life annuity product that pays the annuitant 12,000 at the beginning of each year. A member of your product development team suggests enhancing the product by adding a death benefit that will be paid at the end of the year of death.

Using a discount rate, d, of 8%, calculate the death benefit that minimizes the variance of the present value random variable of the new product.

(A) 0

(B) 50,000

(C) 100,000

(D) 150,000

(E) 200,000