

112. A continuous two-life annuity pays:

100 while both (30) and (40) are alive;
70 while (30) is alive but (40) is dead; and
50 while (40) is alive but (30) is dead.

The expected present value of this annuity is 1180. Continuous single life annuities paying 100 per year are available for (30) and (40) with actuarial present values of 1200 and 1000, respectively.

Calculate the expected present value of a two-life continuous annuity that pays 100 while at least one of them is alive.

- (A) 1400
- (B) 1500
- (C) 1600
- (D) 1700
- (E) 1800