173. You are pricing a special 3-year annuity-due on two independent lives, both age 80. The annuity pays 30,000 if both persons are alive and 20,000 if only one person is alive.

You are given:

(i)

k	${}_k p_{80}$
1	0.91
2	0.82
3	0.72

(ii) $i = 0.05$

Calculate the actuarial present value of this annuity.

(A) 78,300

(B) 80,400

(C) 82,500

(D) 84,700

(E) 86,800