

287. For a special 3-year term life insurance on (50), you are given:

- (i) The death benefit of 10,000 is paid at the end of the year of death.
- (ii) The annual effective rate of interest is 4%.
- (iii) The benefit premium in each of years 1 and 2 is one-half the benefit premium in year 3.
- (iv) Benefit premiums are calculated using the equivalence principle.
- (v) The mortality table has the following values:

x	q_x
50	0.05
51	0.06
52	0.07
53	0.08

Calculate the benefit reserve at the end of year 2.

- (A) 673.08
- (B) 102.28
- (C) 0.98
- (D) -102.28
- (E) -204.12