

**193.** For a population whose mortality follows  $l_x = 100(\omega - x)$ ,  $0 \leq x \leq \omega$ , you are given:

(i)  $\overset{\circ}{e}_{40:40} = 3\overset{\circ}{e}_{60:60}$

(ii)  $\overset{\circ}{e}_{20:20} = k\overset{\circ}{e}_{60:60}$

Calculate  $k$ .

(A) 3.0

(B) 3.5

(C) 4.0

(D) 4.5

(E) 5.0