Illustrative example

For two lives (x) and (y) with independent future lifetimes, you are given:

$$q_x = 0.05 \quad \text{and} \quad q_y = 0.10,$$

and

$$q_{x+1} = 0.06 \quad \text{and} \quad q_{y+1} = 0.12.$$

Deaths are assumed to be uniformly distributed over each year of age.

Calculate and interpret the following probabilities:

1. ${}_{0.75}q_{xy}$
2. ${}_{1.5}q_{\overline{xy}}$

Solution to be discussed in a video lecture.