

Numbers 3, 4, and 5:

For a mortality table with a select period of two years, you are given:

x	$q_{[x]}$	$q_{[x]+1}$	q_{x+2}	$x + 2$
50	0.050	0.065	0.080	52
51	0.055	0.070	0.085	53
52	0.060	0.075	0.090	54
53	0.065	0.080	0.095	55

3. Determine $1000 {}_3p_{[52]}$

4. Using a uniform distribution of deaths assumption between integer ages, determine $1000 {}_{1.5|0.5}q_{[50]}$

5. Using a constant force of mortality assumption between integer ages, determine $1000 {}_{1|1.5}q_{[51]+0.5}$