

MAP 4175 / 5177
Quiz 2

Name: _____
Date: September 20, 2017

Each problem is worth 10 points. Show all work for full credit, and use correct notation.

1. Given ${}_t p_x = (.95)^t$, determine μ_{x+t}

2. Given $\mu_x = \frac{1}{100-x}$, $0 < t < 100$, determine ${}_{20}p_{10}$

3. Given $\int_{50}^{54} \mu_x dx = .1$ and $\int_0^5 {}_t p_{50} \mu_{50+t} dt = .1$, determine q_{54}

4. Given $\mu_x^{ns} = \mu_x^s - .02$ and $p_x^{ns} = .95$, determine p_x^s

5. Given $\mu_x^m = 1.2\mu_x^f$ and ${}_k p_x^f = .75$, determine ${}_k p_x^m$