

MATH 3631 - Actuarial Mathematics II
Spring 2020 - Valdez
Quiz No. 1
Monday, 3 February 2020

Name: EMIL Student ID: Suggested solution

For a whole life insurance policy issued to (45), you are given:

- The actuarial present value of future benefits at issue is 239.08.
- The actuarial present value of future benefits at the end of 15 years is 335.62.
- The actuarial present value of future premiums at the end of 15 years is 158.36.

Calculate the net premium reserve at the end of 15 years.

$$\begin{aligned} {}_{15}V &= APV(FB_{15}) - APV(FP_{15}) \\ &= 335.62 - 158.36 \\ &= \underline{\underline{177.26}} \end{aligned}$$