

MATH 3630 - Actuarial Mathematics I
Fall 2017 - Valdez
Quiz No. 4
Monday, 23 October 2017

Name: _____ **Student ID:** _____

For a special whole life insurance issued to (44) with benefits payable at the end of the year of death, you are given:

- The benefits are \$2 for the first year and \$1 thereafter.
- Mortality in the first year follows a constant force $\mu = 0.01$ and after the first year, mortality follows the **Illustrative Life Table**.
- $i = 0.06$
- Z is the present value random variable for this insurance.

Calculate $\text{Var}[Z]$.