# MATH 3630 - Actuarial Mathematics I <br> Fall 2016 - Valdez <br> Quiz No. 6 <br> Monday, 7 November 2016 

Name: $\qquad$ Student ID:

A whole life annuity-due with annual payments of $\$ 1$ is issued to a person age 97 . You are given:

- $i=3 \%$, and
- the following extract from a mortality table:

| age $x$ | 97 | 98 | 99 | 100 |
| :--- | :---: | :---: | :---: | :---: |
| $\ell_{x}$ | 100 | 80 | 50 | 0 |

Let $Y$ be the present value random variable for this whole life annuity-due.

Calculate $\operatorname{Var}[Y]$.

