

**MATH 3630 - Actuarial Mathematics I**  
**Fall 2015 - Valdez**  
**Homework No. 2**  
**due Wednesday, 5:00 PM, 30 September 2015**

**Please return this page with your signature. Please write your name and student number at the spaces provided:**

**Name:** \_\_\_\_\_ **Student ID:** \_\_\_\_\_

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Suppose that a life table follows the following formula:

$$l_x = 1000 e^{-0.01x}, \text{ for } x \geq 0.$$

1. Calculate the probability that a person now age 35 will survive to reach age 65.
2. Calculate the probability that a person now age 35 will survive to reach age 65, but dies the following 10 years.
3. Calculate  $e_{35}$ , the curtate expectation of life for a person now age 35.