

MATH 3630 - Actuarial Mathematics I
Fall 2016 - Valdez
Quiz No. 1
Wednesday, 8 September 2016

Name: _____ **Student ID:** _____

Suppose you are given the following survival function of a newborn:

$$S_0(x) = 1 - \left(\frac{x}{100}\right)^2, \text{ for } 0 \leq x \leq 100.$$

Calculate the probability that a 20-year-old will survive to reach age 50.