

**MATH 3630 - Actuarial Mathematics I**  
**Fall 2016 - Valdez**  
**Quiz No. 2**  
**Monday, 19 September 2016**

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

Ostin, now age 25, has mortality that follows De Moivre's law with  $\omega = 100$ .

For the next one year, he will travel around the world so that he will now have a constant force of mortality of 0.10 (only for the coming year).

Calculate the probability that Ostin will die between ages 30 and 40. (Note: For 1 point, you must write the actuarial symbol for this probability before doing the calculations.)