

Name: \_\_\_\_\_ Quiz Score: \_\_\_\_\_ /20

**Quiz 4: Thursday, October 30, 2014**

*Write the symbol, the formula, and your work. No credit for answers without sufficient justification. Use standard mathematical notation correctly.*

1. For each of the following, state what it represents in plain English and then give the formula (in terms of an integral or a summation).

(a)  $\bar{A}_x$

(b)  $A_{x:\overline{n}|}^1$

2. Compute each of the following given an effective interest rate of 4% per year and the following life table excerpt.

$x$	$l_x$	$A_x$
35	100,000.00	0.151375
36	99,737.15	0.158245
37	99,455.91	0.165386
38	99,154.72	0.172804
39	98,831.91	0.180505
40	98,485.68	0.188492

(a)  ${}_5E_{35}$

(b)  ${}_5|A_{35}$