

STAT 575  
Homework 10 Problems  
due Wednesday April 26

3 Problems. Show all work.

The numbers refers to *Cunningham et.al*, if not specified otherwise. Some problems may have additional parts.

1. Consider the partial life table:

$x$	$l_x$
80	250
81	217
82	161
83	107
84	62
85	28
86	0

An 82 year old buys a whole life insurance policy that will pay \$10,000 at the end of his death. Suppose the annual effective interest rate is 5%. Calculate the expected present value (APV) of the life insurance policy.

2. p. 156, 5-7 (Hint: Use results of Exercise 5-6)

3. p. 158, 5-15. (Hint: Use Equation (5.35) and follow Example 5.7 (a))