

STAT 575

Practice Problems for Final Exam (not to be turned in)

2 Problems.

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

1. p158, 5-20

2. Let  $Z$  be the present value random variable for a whole life insurance of  $b$  payable at the moment of death.

You are given:

(i)  $\delta = 0.04$

(ii)  $\mu_{x+t} = 0.02, t \geq 0$

(iii) The APV of this insurance policy is equal to  $Var(Z)$ .

Calculate  $b$  and circle the answer below.

(A) 2.75

(B) 3.00

(C) 3.25

(D) 3.50

(E) 3.75