Pstat 172B: Quiz 6 NAME:_____ *May 27, 2008*

The future lifetimes of (25) and (40) are independent and follow a constant force of mortality with $\mu = 0.05$. The force of interest is $\delta = 0.06$.

1. (5 pts.) Find the actuarial present value of an annuity payable continuously at a rate of \$1 per year while at least one of (25) and (40) survives and is below age 50.

2. (5 pts.) Find the net single premium for an insurance of \$1 payable at the moment of death (40), provided that (25), at that time, has died or attained age 40.