Concepts in Economic Evaluation
Problem Set #3

1. Consider the following person tradeoff question:

How many people in perfect health would have to have their lives extended by one year to have the same value as extending the lives of 1000 people with late stage AIDS.

Consider that a respondent says 345. What is the weight that this respondent places on late stage AIDS?

2. Consider the following sequence of health utility measurements:

   O Months: 0.95
   2 Months: 0.94
   4 Months: 0.93
   8 Months: 0.89
   12 Months: 0.86
   16 Months: 0.88
   20 Months: 0.85
   24 Months: 0.74
   28 Months: 0.80
   32 Months: 0.88
   36 Months: 0.92

Calculate the number of QALYs this person has experienced using a discount rate of 3%.
(Showing all work will allow us to assign partial credit as necessary).

3. Consider a health utility questionnaire with only 3 domains (physical role, social role, and cognitive health), each of which has two levels (no problem and some problem). Suppose that the scoring algorithm is as follows:

   For some physical problem subtract 0.12
   For some social problem subtract 0.35
   For some cognitive problem subtract 0.42
   For the first problem subtract an extra 0.2
   If a person has all three problems subtract and extra 0.4

Calculate the utility of having some social problem but no others.

Calculate the utility of having some social problem and some cognitive problem.

Calculate the utility of having some problem in all three domains.