Freshman Engineering Seminar Homework 8: Probability Analysis

This assignment will be due at the beginning of class on **Wednesday, 11 November 2015**

**NOTE:** For each problem below, you can either solve the problem using a computer programming language/application OR you can solve the problem by hand on engineering paper.

**Part 1) Optional**

Read the quotes located at [http://www.ecoccs.com/tsuteach.html#quote](http://www.ecoccs.com/tsuteach.html#quote)

**Part 2) Required**

# 1) According to the Annual death rate from malignant neoplasms table, what is the probability that a directly exposed **hibakusha** (Person-years 1968-1972) living within 2 kilometers of Hiroshima would die:

a) All **hibakusha**

and

b) Non-**hibakusha**.

* 2) A couple has three children, and it is known that at least one of the children is a girl. What is the probability that the couple has at least one boy, assuming that having a boy or girl is equally likely?

% 3) An electronic controlling mechanism requires five identical memory chips. In how many ways can this mechanism be assembled using 5 given chips?

% 4) In how many different ways can 3 of 20 laboratory assistants be chosen to assist with an experiment?

% 5) In how many different ways can one make a first, second, third, and fourth choice among 12 firms leasing construction equipment?


**Works Cited**

