CSCI 1900 - Homework 2-B

**Section 1.1: Sets and Subsets** *(26 points)*

1. Let . Identify each of the following as True or False. (4)
   1. 0  *A*
   2. 9  *A*
   3. 3.14  *A*
   4. -1  *A*
2. Let . (2)
   1. Describe the set by enumeration.
   2. Describe the set with an English sentence.
3. Let . (1)
   1. Describe the set *C* by specifying the properties of its elements.
4. Give all the subsets of the set {*7*, *11* }. (1)
5. Give all of the subsets of . (1)
6. Let . (5)

Identify each of the following as True or False

* 1. {1, 2, 3, 4} *D*
  2. {-4, 3, -2, -5} *D*
  3. *D*
  4. *D*

1. Find the cardinality of the smallest set that has the following sets as subsets (1)
2. By referring to the Venn diagram, identify each of the statements as True or False. (8)

U

A

B

D

.a

.b

.d

1. Let . (3)
   1. Give *P(E)*.
   2. What is | *E* | ?
   3. What is | *P(E)* | ?