Name: _____ **Student#:** _____**Date:** _____

COMP 2711: Discrete Mathematical Tools for Computer Science

In Class Exercise #2

1. Which of the following statements (in which Z^+ stands for the positive integers and Z stands for all integers) is true and which is false? Don't forget to explain why.

a) $\forall z \in Z^+ (z^2 + 6z + 10 > 20)$
b) $\forall z \in Z, (z^2 - z \geq 0)$
c) $\exists z \in Z^+, (z - z^2 > 0)$
d) $\exists z \in Z, (z^2 - z = 6)$

Answer:
a)

b)

c)

d)