MATH 1030: Homework 3

due January 27, 2014

Instructions: Do the following problems on a separate sheet of paper. Show all of your work.

Book Exercises

§1D Exercises 28, 32, 41, 48, 50, 51

Problem 1

Determine whether the following arguments are inductive or deductive. If the argument is inductive, is it a weak or strong argument? If the argument is deductive, is the argument valid or invalid? If the deductive argument is valid, is it sound? Justify all of your answers.

(a)
Premise #1:	Tough gangs get articles written about them in the newspaper.
Premise #2:	There is an article in the newspaper about the Orphans.
Conclusion:	The Orphans are a tough gang.

(b)
Premise #1:	The Boppers, the Hi-hats, the Moonrunners, the Jones-Street Boys, and the Hurricanes are influential gangs.
Premise #2:	Many gangs, including the Boppers, the Hi-hats, the Moonrunners, the Jones-Street Boys, and the Hurricanes attended the big meeting.
Conclusion:	All influential gangs attended the big meeting.

(c)
Premise #1:	None of the Warriors had ever been to the Bronx before.
Premise #2:	Luther had been to the Bronx before.
Conclusion:	Luther is not a Warrior.

(d)
Premise #1:	The Warriors are good with any weapons – "real good."
Premise #2:	Swan is good with any weapon.
Conclusion:	Swan is a Warrior.