Name: _	
Section:	

# Linguistics 001 Spring 2009 Homework 4

Due: Wed, Feb 25 @ 12pm

### **I.** Adjectives

Categorize the adjectives in the following noun phrases. Some adjectives will fit into more than one category.

	Intersective	Subsective	Privative
A <u>red</u> dog			
A famous linguist			
A phony phone			
A <u>fast</u> bike			
The smartest Kindergartner			

## II. Polysemy/Homophony

Identify each word as polysemous or homophonous (over just the definitions supplied)

- a) *leech*: a bloodsucking worm; a hanger-on who seeks advantage
- b) range: a cooking stove; a series of mountains
- c) race: the act of running competitively; a cultural construct identifying common ancestry

# III. Predicate Logic

Using the functions and arguments described below, answer parts (a) and (b).

#### predicates:

breaks

B1: given x and y, x breaks y

B2: given x, x breaks

kicks

K1: given x and y, x kicks y

K2: given x, x kicks

dramatis personae:

J: John (an AGENT)

V: the vase (a THEME)

#### logical operators:

AND = true iff P is true and Q is true

OR = true if P is true,

if Q is true,

or if both are true

facts about the world:

objects don't have legs people don't break

John destroys pottery

(a) Evaluate the following statements (true/false), and translate them into natural language

B1(J,V) =

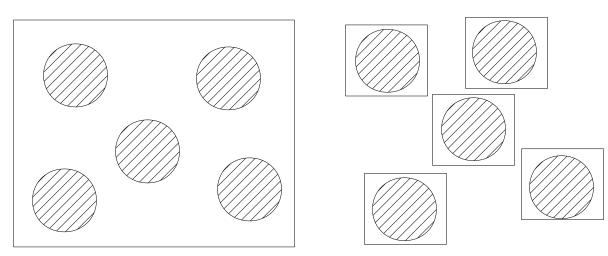
translation:

$$B2(V) =$$
 $translation$ 
 $K2(V)$  AND  $K2(J) =$ 
 $translation$ 
 $K1(J,V)$  OR  $K1(V,J) =$ 
 $translation$ 
 $B2(J) =$ 
 $translation$ 

(b) What is the crucial difference between the one-place predicates K2 and B2?

# **IV Quantifier Scope:**

GROUP B GROUP B



"All circles are inside a square"

Below is one reading of this phrase. Look at the two group above and identify

- the group that this reading refers to
- the arguments x and y.

Hint: x and y represent entities. The only two entities we're dealing with are "circles" and "squares"

 $\exists y. \forall x. inside(x,y)$ 

Group:

 $_{\rm X} =$ 

y =