

COMP 681 Formal Methods Spring 2008 Recitation 9

1. Translate the following argument into the language of predicate logic and use a Venn diagram to show that it is valid. Be sure to indicate the meanings of the predicate symbols you use.

All cats and dogs are pets. Some cats eat birds. Anything that eats birds should be shot. Therefore, some pets should be shot.

2. Translate the following argument into the language of predicate logic. Be sure to indicate the meanings of the predicate symbols you use.
 - a. Cats purr when they're happy.
 - b. Black ducks and white geese both fly and swim.
 - c. Milk is healthy and sometimes tasty.
 - d. Some dogs bark when they run.