

# Course Name

## Assignment Name

FirstName LastName  
12345678

### Problem 1

Some text defining the question and the detail of things wanted. This Text is only a place holder for the future replacement by the question given.

#### 1.1 a. part one of the problem

$$Happy \sqcap Person$$

#### 1.2 b. part two of the problem

$$\exists Owns.Animal \sqcap (Happy \sqcap Person)$$

#### 1.3 c. part three of the problem

$$Person \sqcap \forall Owns.Cat$$

**Assumption:** I assume the question is asking for pet owners who have one or more cats, one or more fishes, or, cats and fishes together but the owner must not have any other kind of pet.

$$(Person \sqcap \exists Owns.Animal) \sqcap \forall Owns.(Cat \sqcup Fish)$$