

**SD-230 Problem Solving and Programmatic Logic**

**In-Class Exercise # 1**

*\*\*Note: You can do this in groups if you like, or you can do it on your own.*

**Task # 1: State the truth value for each of the following statements:**

1. 7 - 3 = 2 T
2. 4 < 5 T
3. 4 <= 5 F
4. (4 < 5) Λ (10 > 2) T
5. (4 < 5) V (10 < 2) T
6. (4 > 5) V (10 < 2) F
7. ~(4 > 5) Λ (10 > 2)T

**Task # 2: Given the following statements and variables:**

**Let a = Gramma has a cat.  
Let b = The cat is a Calico.  
Let c = The dog is a dope.  
Let d = A sheep says "woooo!".**

**Write each of the following logical expressions in plain English:**

1. a Λ b **Gramma has a cat, and the cat is a Calico**
2. c Λ ~d **The dog is a dope, and a sheep can’t says "woooo!".**
3. b V c **The cat is a Calico, or the dog is a dope**
4. ~d V a **A sheep can’t says "woooo!", or gramma has a cat.**