Name: \_\_\_\_\_\_\_\_\_\_Demetrius Johnson\_\_\_\_\_\_\_\_\_\_\_\_\_

*No calculators are allowed.* Show your work. The points for each problem are indicated. Problems with incomplete work may receive partial, or no credit.

***COs: [No direct COs]***

**Points: \_\_\_\_\_\_\_\_\_\_\_\_\_\_ / 20**

1. [15 pts] Given the following sets, compute the requested set operations

A = {1, 2, 4, 6}  
B = {2, 3, 4, 5, 6}  
C = {1, 6}

D = {7, 9, 12}

* 1. Find A B
  2. Find A C

* 1. Find A B

* 1. Find A D

1. [5 pts] Find the truth value of the following compound proposition, given the following simple propositions:

A = The Sun is hot  
B = 4 > 9  
C = Water is wet

Compound proposition**: (A B) C**