**Math 116: Written Homework Set 8**

**This assignment is due on Monday, November 7th in class. Show all work where possible! Answers magically appearing will receive no credit.**

1. Let , , , .   
 Find each of the following.  
 a.  d.   
 b.  e.   
 c.  f. 

2. Draw a Venn diagram to show each of the following sets.  
 a.  c.    
 b.  d. 

3. Let , , , .   
 Find each of the following.  
 a.  d.    
 b.  e.   
 c.  f. 

4. For the sets specified in problem 3, verify that



5. If , , and , find .

**Selected Answers**

1. a. {1, 2, 4, 5, 6, 8}  
 c.   
 e.

2. a. Sketch a Venn diagram with region **I** shaded.  
 c. Sketch a Venn diagram with regions **I**, **II**, and **V** shaded.

3. a. 3  
 c. 3  
 e. 1  
  
5. 155