#### Eric Rouse

### Individual Assignments #58

Assignment: Section 2.1: 6, 8, 12, 16, 18, 28

## **Q6**

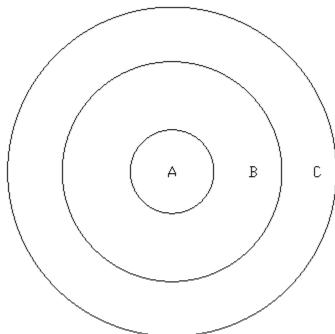
- a) No
- b) No
- c) Yes
- d) Yes
- e) Yes
- f) Yes

## **Q8**

- a) T
- b) T
- c) T
- d) T
- e) T
- f) F
- g) F

# Q12





## **Q16**

Set 1: A = {1} & B = {{1},2}

Set2:  $A = \{x,y\} \& B = \{z,12,m,\{x,y\}\}\$ 

### **Q18**

- a) 0
- b) 1
- c) 2
- d) 3

### **Q28**

- a)  $\{(a,x,0),(a,x,1),(a,y,0),(a,y,1),(b,x,0),(b,x,1),(b,y,0),(b,y,1),(c,x,0),(c,x,1),(c,y,0),(c,y,1)\}$
- b)  $\{(0,x,a),(0,x,b),(0,x,c),(0,y,a),(0,y,b),(0,y,c),(1,x,a),(1,x,b),(1,x,c),(1,y,a),(1,y,b),(1,y,c)\}$
- c)  $\{(0,a,x),(0,a,y),(0,b,x),(0,b,y),(0,c,x),(0,c,y),(1,a,x),(1,a,y),(1,b,x),(1,b,y),(1,c,x),(1,c,y)\}$
- d)  $\{(x,x,x),(x,x,y),(x,y,x),(x,y,y),(y,x,x),(y,x,y),(y,y,x),(y,y,y)\}$