Sets-Test

Class:\_\_\_\_\_ Number:\_\_\_\_ Name:\_

## Part A: Multiple Choice

1. Which of the following represents the shaded region ?



a) A⊂B	b) A intersection B	c) B⊂A	d) A union B
2. Let A={1,3,4} and B={ $x x$ is an even whole number less than 9}. Find AU B.			
a) {1,2,3,4,5,6,7,8}	b) {1,3,4}	c) {1,2,3,4,6,8}	d) {2,4,6,8}
3. Which of the following is not an element of $A = \{b,g,5,8,12\}$			
b) 8	b) 12	c) c	d) g
4. What type of set is denoted as either $\{\}$ or $\emptyset$ ?			
a) Disjointed Set	b) Superset	c) Subset	d) Empty Set
5. Identify the shaded area.			
A			
a) B	b) A'	c) B'	d) A
6. Identify the shaded area.			
A			
a) A∩B	b) A' ∩B'	c) A' UB'	d) AUB
7. Identify the shaded area.			
A			

8. Identify the shaded area.



Part B: Short Answer

1.



Suppose  $U=\mathbb{R}$ 

- a. Copy the Venn diagram and label the sets  $\mathbb{Q}, \mathbb{Z}$ , and  $\mathbb{N}$ . Shade the region representing  $\mathbb{Q}'$
- b. Place these numbers on the Venn diagram:  $7, \frac{1}{5}, 2, \overline{8}, -\pi, 0, \sqrt{7}, -2, -3.5$

2. At a conference, the 58 delegates speak many different languages. 28 speak Arabic, 27 speak Chinese, and 39 speak English. 12 speak Arabic and Chinese, 16 speak both Chinese and English, and 17 speak Arabic and English. 2 speak all three languages. How many delegates speak: a. Chinese only b. none of these languages c. neither Arabic nor Chinese?