CSCI 1900 Test 1 Review Problems

Let

 

1. True or False 
2. True or False 
3. True or False 
4. True or False 
5. True or False 
6. True or False 
7. What is | *V* *|*?
8. What is | *P( V )* | ?
9. Find .
10. Find  .
11. Find .
12. Find  .
13. Find 
14. Draw a Venn diagram showing  .
15. State the two properties known as De Morgan’s Law.
16. Verify $\overbar{A∩B}= \overbar{A} ∪ \overbar{B}$ for the sets *A* = { 1, 2, 5 } and *B* = { 2, 3, 5 } with
*U* = {1, 2, 3, 4, 5, 6 }.
17. State the inclusion-exclusion principle for 3 sets.
18. Give the set-builder description for the set *D =* { 2, 5, 8, 11, 14, … , }.
19. Give the enumeration description for the set *E* = $\left\{ e | e= w^{2}+1 and w ϵ W \right\}$
20. Let .
	1. Is this formula explicit or recursive?
	2. What are the values of  and  ?
21. Let 
	1. Is this formula explicit or recursive?
	2. What are the values of  and  ?
22. What is the string that corresponds to the sequence R, a, g, l, a, n, , R, o, a, d ?
23. Given the strings *0, 1, 10, 11, 100, 101, 110, 111*, what is the set that corresponds to this sequence?
24. Given 
	1. What is ?
	2. What is ?
	3. What is ?
	4. What is ?
	5. What is ?