

Computer Science 1	Exercises 11.01-04	Date:
Name:		Period:

1. A good understanding of _____ will help tremendously in writing program code that is logically correct.
2. What branch of mathematics was founded by George Boole?
3. Refer to the previous question. In this branch of mathematics, statements are either _____ or _____.
4. What are the criteria for a sentence, statement, or condition to be a *Boolean statement*?
5. Are questions, ambiguities, or arguments considered *Boolean statements*?
6. What is the basis for processing data? And how does that relate to Boolean Logic?

In questions 7-10, answer "yes" if the statement is a Boolean statement, and "no" otherwise.

7. Washington DC is the capital of the United States of America.
8. $2 + 2 = 5$
9. Hello, how are you today?
10. *Mint Chocolate Chip* ice cream is better than *Moolenium Crunch*.

In questions 11-13, complete the Boolean operator tables.

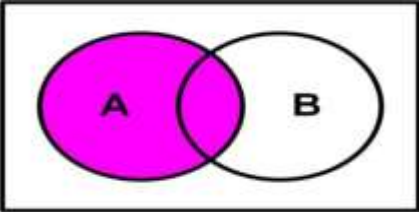
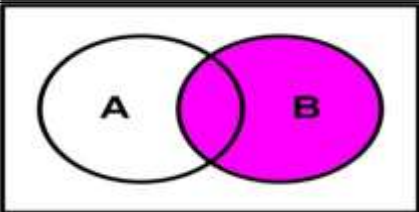
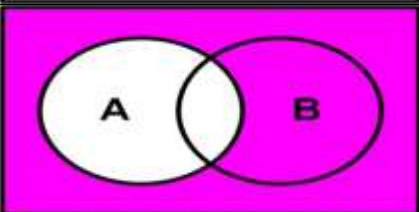
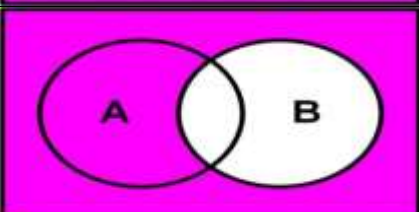
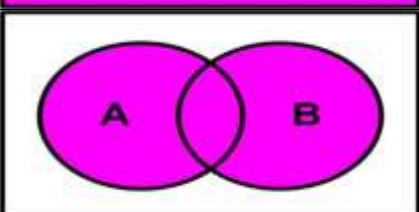
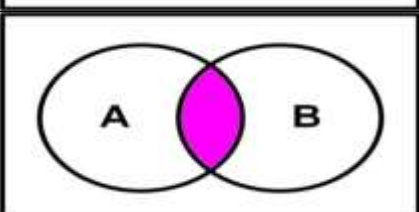
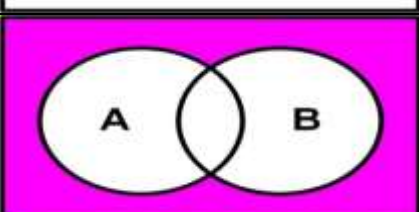
11. The OR Operator		
A	B	A or B
T	T	
T	F	
F	T	
F	F	

12. The AND Operator		
A	B	A and B
T	T	
T	F	
F	T	
F	F	

13. The NOT Operator	
A	not A
T	
F	

Match the Venn Diagram on the right to the expression on the left.
 Note: Some Venn Diagrams are used more than once. Others are not used at all.

14.		A or B
15.		A and B
16.		not A
17.		not B
18.		not(A or B)
19.		not(A and B)
20.		not A and not B
21.		not A or not B

A.	
B.	
C.	
D.	
E.	
F.	
G.	
H.	