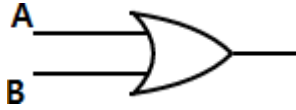
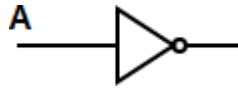


## Grade 8 – Information Technology Spot Test

Question 1: Identify logic gates and complete the truth tables.



A	B	Output



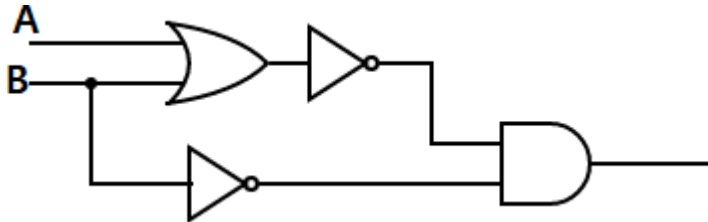
A	Output



A	B	Output

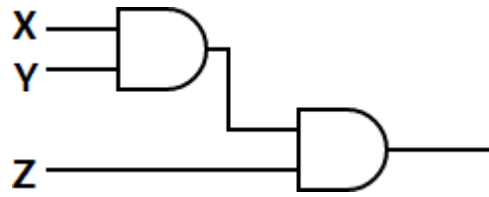
Question 2: Complete the following truth tables given below according to the logic gates.

### Question 1



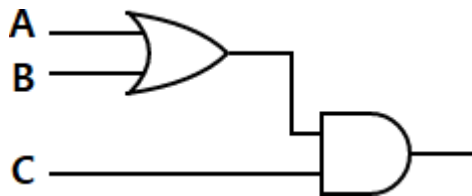
$A$	$B$	$A + B$	<del><math>A + B</math></del>	<del><math>B</math></del>	<del><math>(A + B) \cdot B</math></del>
0	0				
0	1				
1	0				
1	1				

### Question 2



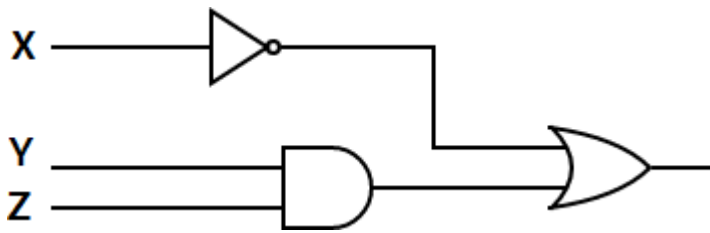
$XX$	$Y$	$Z$	$XX.Y$	$(XX.Y).Z$
0	0	0		
0	0	1		
0	1	0		
0	1	1		
1	0	0		
1	0	1		
1	1	0		
1	1	1		

### Question 3



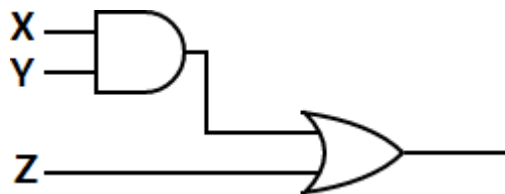
$A$	$B$	$C$	$A + B$	$(A + B).C$
0	0	0		
0	0	1		
0	1	0		
0	1	1		
1	0	0		
1	0	1		
1	1	0		
1	1	1		

### Question 4



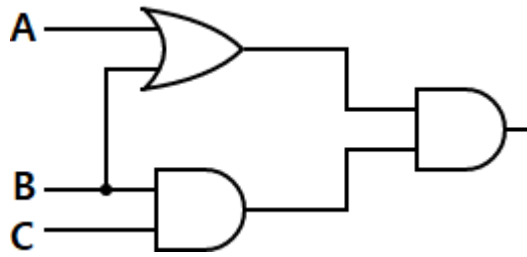
$X$	$Y$	$Z$	$\neg X$	$Y \cdot Z$	$\neg X + (Y \cdot Z)$
0	0	0			
0	0	1			
0	1	0			
0	1	1			
1	0	0			
1	0	1			
1	1	0			
1	1	1			

### Question 5



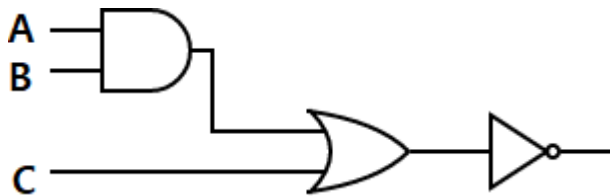
$X$	$Y$	$Z$	$X \cdot Y$	$(X \cdot Y) + Z$

### Question 6



$A$	$B$	$C$	$A + B$	$B \cdot C$	$(A + B) \cdot (B \cdot C)$

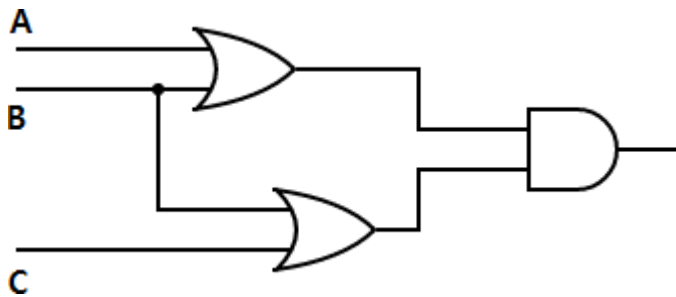
### Question 7



$A$	$B$	$C$	$A \cdot B$	$(A \cdot B) + C$	$\neg(A \cdot B) + C$

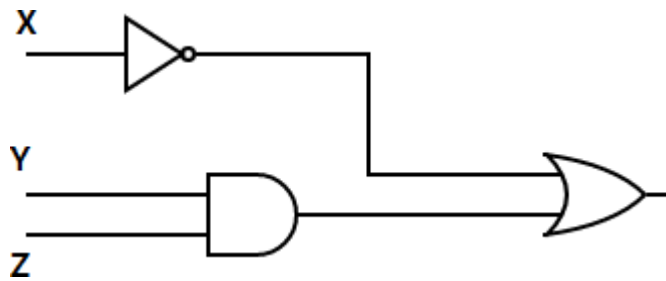
Question 3: Write the expression and draw the truth tables for given flowcharts.

### Question 1



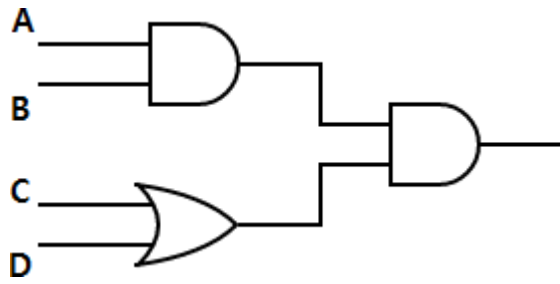
A	B	C	

### Question 2



X	Y	Z	

## Practice Questions



$A$	$B$	$C$	$D$	$A \cdot B$	$C + D$	$(A \cdot B) \cdot (C + D)$

