



Question 1: Forming Equations from Logic Diagrams What equation does this circuit diagram represent?

Question 2: Forming Logic Diagrams from Equations Draw the circuit diagram that represents the equation below.

$$Y = \overline{(\bar{A})(\bar{B} + \bar{C}) + \bar{D}\bar{E}}$$

Question 3: Forming Truth Tables from Equations Fill in the truth table for the following equation:

$$Y = \overline{A}\overline{B} + \overline{A}B$$

A	B	C	Y
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: Forming Equations from Truth Tables Write down the boolean equation for the following truth table, where Y is a function of the three inputs, A , B , and C :

A	B	C	Y
0	0	0	0
0	0	1	1
0	1	0	0
0	1	1	0
1	0	0	1
1	0	1	0
1	1	0	1
1	1	1	1