

1 (a) Tick (✓) **one** box to identify the correct logic statement for this truth table.

A	B	C	X
0	0	0	1
0	0	1	0
0	1	0	0
0	1	1	0
1	0	0	0
1	0	1	0
1	1	0	1
1	1	1	0

NOT (A AND B AND C)

(A XOR B) NOR C

(A OR B OR C) NOR C

NOT A AND NOT B AND NOT C

[1]

(b) Draw a logic circuit for the logic expression:

$$X = \text{NOT} (\text{NOT } A \text{ AND } (\text{NOT } B \text{ XOR } C))$$



[2]