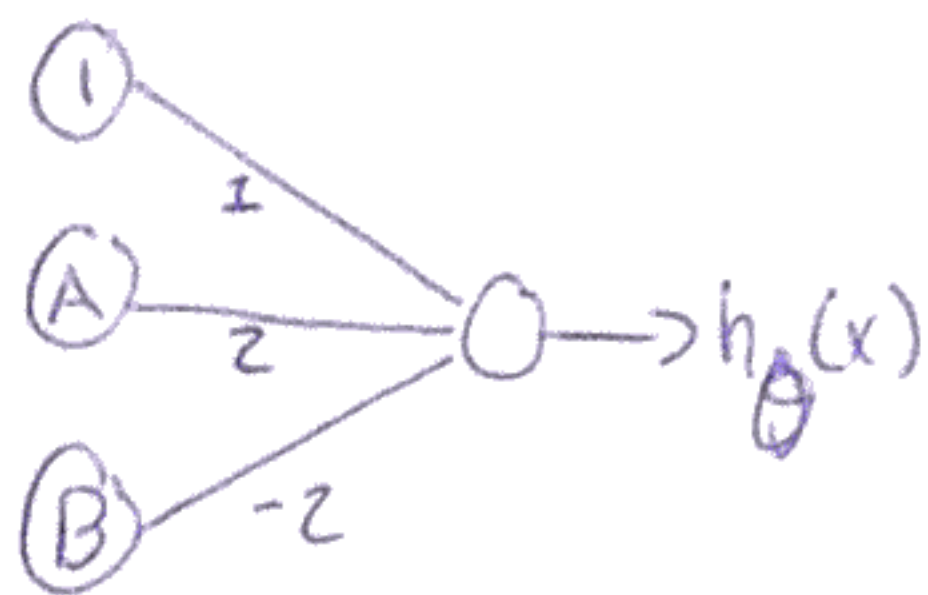


4.2)

a)  $A \cap \neg B$

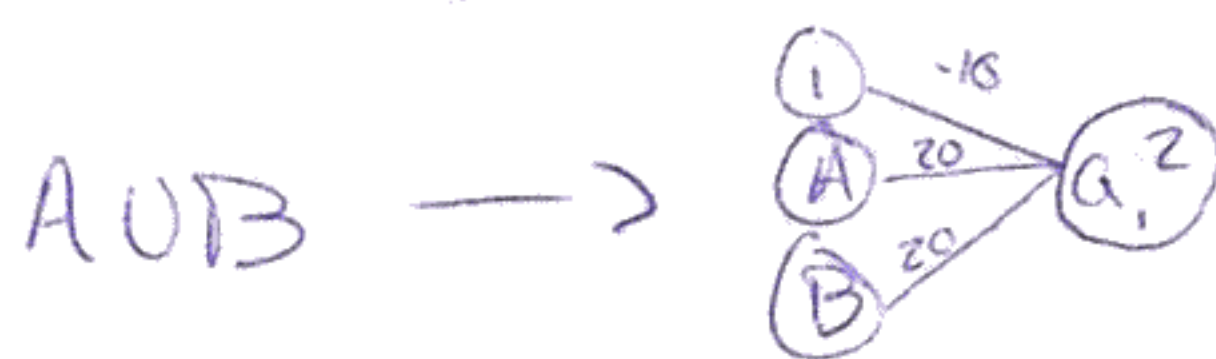
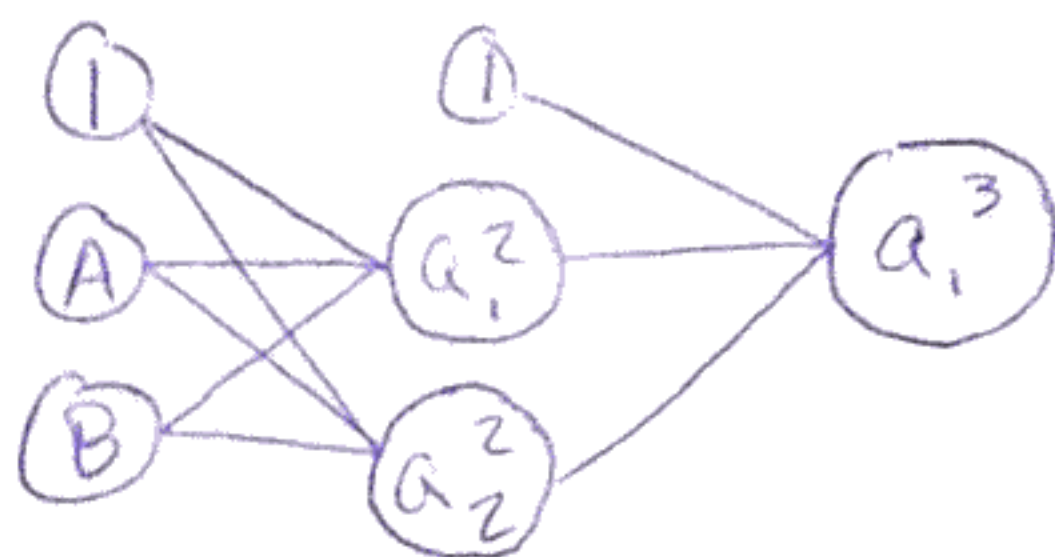
| A | B | $A \cap \neg B$ |
|---|---|-----------------|
| 1 | 1 | 0               |
| 1 | 0 | 1               |
| 0 | 1 | 0               |
| 0 | 0 | 0               |



b)  $A \text{ XOR } B$

| A | B | XOR |
|---|---|-----|
| 1 | 1 | 0   |
| 1 | 0 | 1   |
| 0 | 1 | 1   |
| 0 | 0 | 0   |

$$A \text{ XOR } B = (A \cup B) \cap \neg(A \cap B)$$



second layer  
analogous to  $A \cap \neg B$  from above

