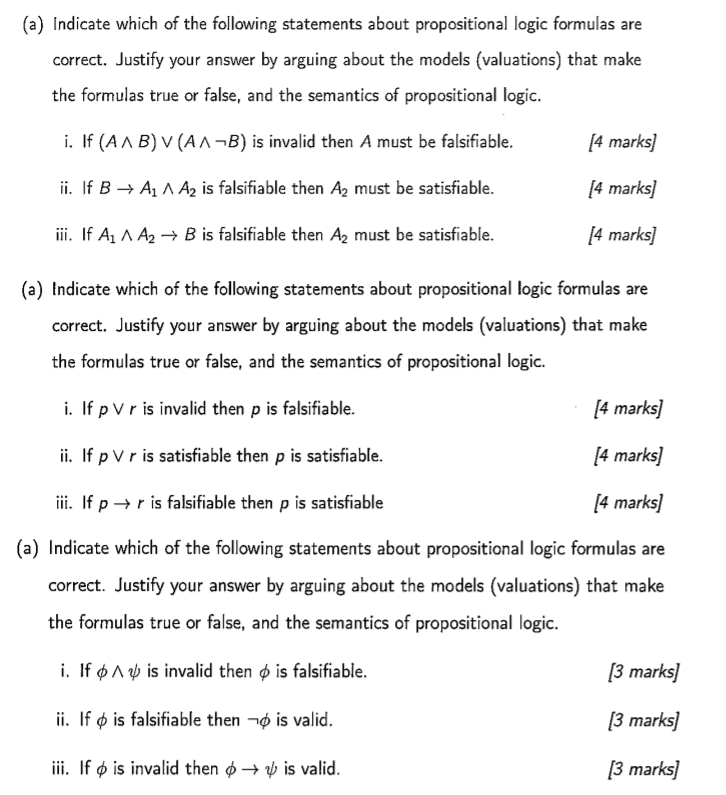
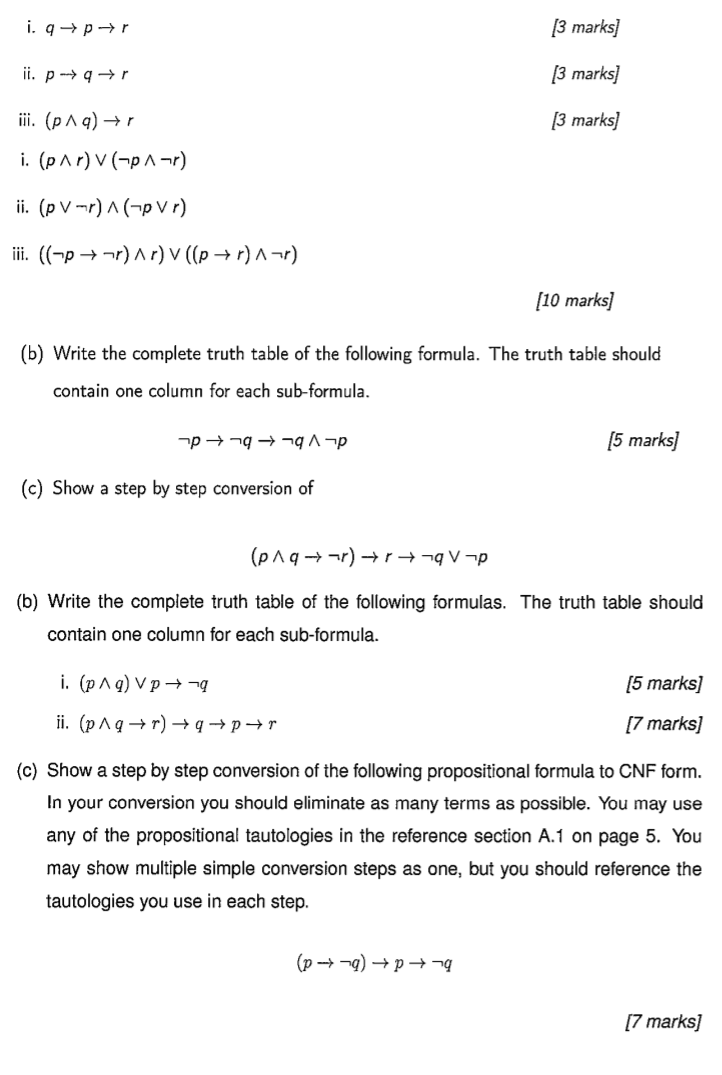
**Formal Verification**

**Question 1**

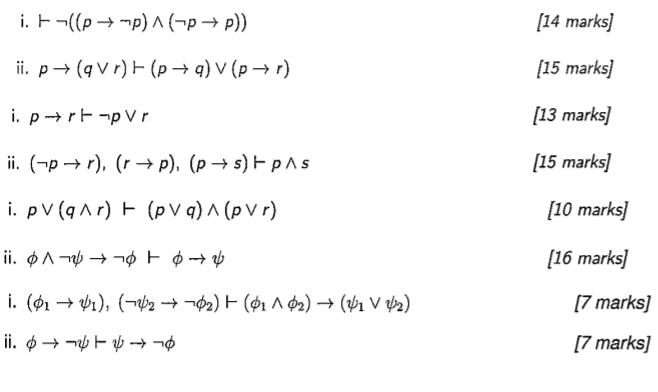
Indicate if statements are correct.



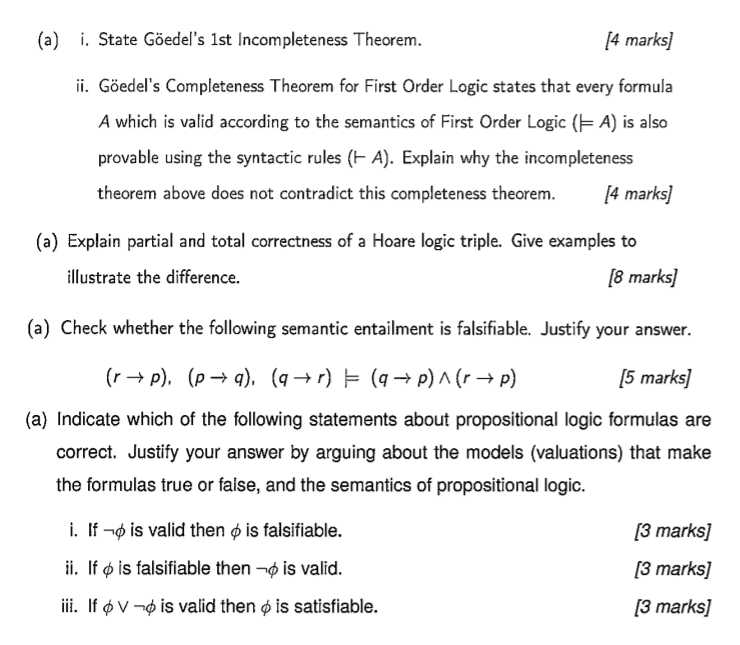
Determine which of the following formulas are equivalent. Can use truth tables and tautologies.



Give classical syntactic proofs for the following sequents.

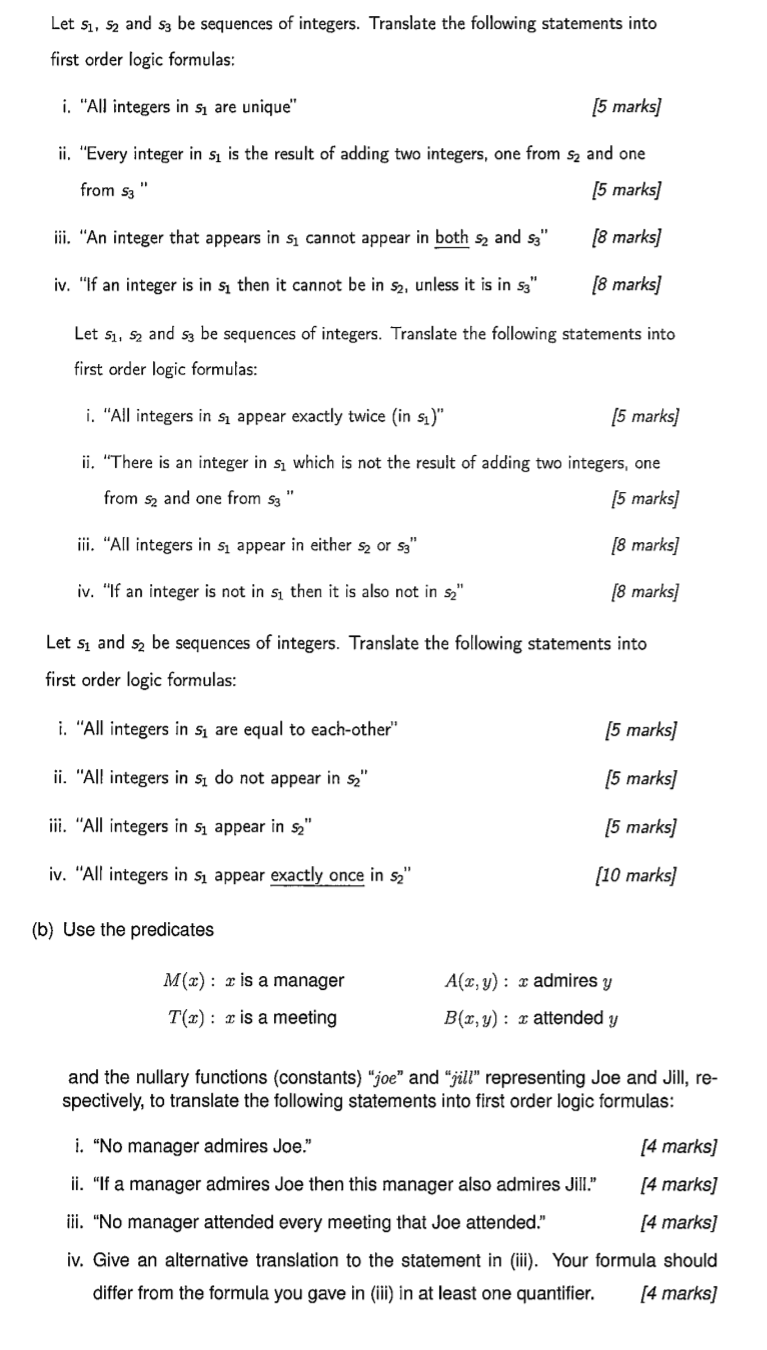


**Question 2**



(b)

Translate the following statements into FOL formulas



(c)

Give syntactic proofs of the validity of the following sequents.

