Quin Buob
HW6

1) You can't prove the parralel axiom from the other axioms because there are other non-euclidean geometrics, and in these the other 4 axioms hold, but the parallel statement is false.

2) Gödel statement
S = "S is not Provable"
Proof by contradiction
Suppose that S is false, then S must be provable. This is a contradiction because if S is false the S is provable which means that a statement that is not provable is provable
→← S must be true there is a statement that is not provable.

3) I dont know

4) i) [A,B] = [T,T] Not consistent
[A,B] = [T,F] Consistent
[A,B] = [F,T] consistent
[A,B] = [F,F] Not Consistent

ii) [A,B] = [T,T] Not consistant
[A,B] = [T,F] Not consistent
[A,B] = [F,T] Consistant

iii) [A,B,C] = [T,T,T] Not consistant

[A,B,C] = [T, F, T] Consistant

[A,B,C] = [T, F, F] Not consistant

[A,B,C] = [F,T,T] = Not consistant

[A,B,C] = [F, F,T] = Not consistant

[A,B,C] = [F,F,F] = Not Consistent

iiii) I don't know