Homework for Unit II, Lesson 2: TL (Pt. II)
Well-formed formulas and Main Operators

Which of the following are sentences of TL? Which are not? Explain.

1. & I
2. B & Z
3. ~O
4. M ~ N
5. J ⊃ (K ⊃ (A ∨ N))
6. **P ∨ Q**
7. (I ∨ [T & E])
8. (U & C & ~L)

For each of the following sentences, identify whether the sentence is a negation, a conjunction, a disjunction, a conditional, or a biconditional; i.e., identify the main operator.

1. A ⊃ B
2. ~A ∨ B
3. ~A ≡ ~ B
4. ~~(A ⊃ B)
5. ~A ⊃ (B & ~D)
6. (D ≡ ~A) ≡ B
7. ~(A ≡ B) & (~C ⊃ D)
8. ~~~B
9. ~(~A ⊃ ~B)
10. ~A ⊃ B