

## **Summary: Indirect Test of Validity**

- (i) **Assume the argument is invalid** by picturing a validity counterexample: a situation where all the premises are true, but the conclusion is false.
- (ii) Use the **semantic rules** to follow through all the consequences of this assumption.
- (iii) If the assumption of invalidity leads to a **violation of Bivalence** – some sentence being both true and false – then the argument is **valid**.

If the assumption of invalidity leads to **no violation of Bivalence** – if each sentence has only one truth value – then the argument really is **invalid**.