

Implications

- Read pages 42 through 46 (sections 2.4 and 2.5)
- Some key questions to answer:
 1. What is an implication? What are the various ways we describe it (there are at least 5-6 verbal ways)?
 2. What is the truth table for an implication?
 3. Explain in your own words why an implication “if P then Q ” is true when P is false.
 4. Is “if P then Q ” the same as “if Q then P ”? If not, provide an appropriate example.
 5. How can we express the truth table for “if P then Q ” using negations, disjunctions and/or conjunctions?
 6. What are the hypothesis and the conclusion in an implication?
 7. Give examples of open sentences (involving a variable) with implications, and determine their truth or falseness for each value in the domain of the variable.
 8. Study example 2.9
- Practice problems from section 2.4 (page 67): 2.19, 2.20, 2.23, 2.25, 2.29
- Practice problems from section 2.5 (page 68): 2.30, 2.32, 2.34