

Direct Proofs

- Read pages 80 through 84 (section 3.2)
- Some key questions to answer:
 1. What steps do we employ when we want to prove a result “for $x \in S$, if $P(x)$ then $Q(x)$ ” using *direct proof*? Be specific.
 2. What is the precise definition of saying that an integer n is *even*?
 3. What is the precise definition of saying that an integer n is *odd*?
 4. What do we refer to as a *proof strategy*, and what as a *proof analysis*? Make sure you understand the difference.
 5. Make sure you understand the proof of “result 3.4”, as well as the last paragraph in the proof analysis for that proof.
 6. Study carefully all the example proofs in this section.
- Practice problems from section 3.2 (page 94): 3.9, 3.12, 3.11, 3.13