Proofs by Counterexample

- Read carefully pages 120 through 124 (section 5.1)
- Some key questions to answer (try these without looking at the book, but after you've read the book):

    1. What do we call a "counterexample"?
    2. What statements does a counterexample approach allow us to prove?
    3. Can a counterexample be used to prove a statement $\sim \exists x, P(x)$ is false?
    4. Give various examples of proof by counterexample.

- Practice problems from section 5.1 (page 137): 5.2, 5.3, 5.6, 5.9