Chapter 4. Applications of Derivatives

4.6 Applied Optimization Problems

Example. Page 268 number 2.

Note. Strategy for Solving Max-Min Problems

- 1. Draw a picture and label the unknowns and constants (if appropriate).
- 2. State the question in terms of the unknowns.
- **3.** Find a relationship between the unknowns.
- **4.** Write the desired quantity as a function of one unknown.
- **5.** Maximize/Minimize the function.

Examples. Page 269 number 12, page 270 number 24, page 273 number 56.