Chapter 4. Applications of Derivatives

4.5 Applied Optimization Problems

Example. Page 309 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 310 number 12, page 311 number 24, page 314 number 48.