

Name: _____

4.3 Optimization Part 2

1. The product of two nonnegative numbers is 144. What is the minimum value of their sum?
2. A rectangle has one vertex on the origin and the other on the curve $y = e^{-2x}$. Estimate the maximum area of the rectangle.
3. On the same side of a straight river are two towns, and both towns want to build a pumping station S. Where should the pumping station be located to minimize the TOTAL length of pipe used to connect each town to the pumping station?

