

## Applied Maximum and Minimum Problems

1. Express the number 20 as the sum of two nonnegative numbers whose product is as large as possible.
2. A rectangular plot of farmland will be bounded on one side by a river and on the other three sides by a single-strand electric fence. With 800 m of wire, what is the largest area you can enclose?
3. You are designing a rectangular poster to contain 50 square inches of printing with a 4 inch margin at the top and bottom and a 2 inch margin at each side. What overall dimensions will minimize the amount of paper used?