

Algebra II

7-7

(Day 2)

Word Problems

In a quadratic, where is the minimum or maximum value always located?

How can we tell if a quadratic will have a maximum or a minimum just by looking at the equation?

- 1) The sum of two numbers is 20. If one number is x , then the other number is ? . Their product $p(x) = \underline{\hspace{2cm}}$. Find the maximum value of p .

- 9) A charter company will provide a plane for a fare of \$60 each for 20 or fewer passengers. For each passenger in excess of 20, the fare is decreased \$2 per person for everyone. What number of passengers will produce the greatest revenue for the company?