

1. A baker maker finds that he can sell 60 pies at a price of 90 cents each. He also finds that for each dollar he lowers the price he will sell 10 more pies and that for each dollar he raises the price, he will sell 10 fewer pies. He produces the pies at a cost of 2 dollars each to himself. What price should he charge to maximize his profit?

2. A book publisher finds that it can sell 200 books at a price of 16 dollars each. It also finds that for each dollar it lowers its price it will sell 20 more books and that for each dollar it raises the price, it will sell 20 fewer books. It produces the books at a cost of 8 dollars each to itself. What price should it charge to maximize its profit?