You have a small business which sells boxes of greeting cards. Assume that the demand $x$ for boxes is inversely proportional to the square of the price $p$ of a box of cards. If you charge $20 per box, 125 boxes are sold. Your initial investment is $750 and the cost to you for each box is $5. Find the price $p$ and the number of boxes $x$ which will result in the maximum profit to you.