A company produces two lines of products, A and B, which it can sell at unit prices of $200 and $300, respectively. The factory has a total area of 10000 square feet, with employees that work a total of 1050 man hours per day, and presently buys 30 tons of raw materials daily. Producing each unit of A demands an area of 50 square feet for a full day, 3 man hours of work, and 100 kilos of raw materials; each unit of B demands 40 square feet, 6 man hours, and 180 kilos.

Business is blooming, and the company is considering expanding. Up to what rent per extra square foot per day would it be profitable for it to pay? What hourly wages will make hiring more workers lucrative? Up to what price should the company pay for more raw materials?