

Management individual homework flashcard



**ASSIGN
BUSTER**

Management Individual Homework Due 6 March, 2014 1. In the EGO model, when demand doubles, there will be a higher cycle Inventory level and therefore each unit of Inventory will stay In the system for a longer time before It Is sold. Indicate whether the statement Is true or false and Justify your answers. (1 point) 2.

Yankee Company Ltd. Is in the business of making and marketing premium apparel to the United States. One popular item sold each winter is a man's ski Jacket that Yankee sources from an Asian supplier, Red Star.

Due to the long production and transportation lead-times, Yankee has to order from Red Star well in advance of the selling season. The unit price Yankee charges its customers (the retailers) is \$300.

The unit wholesale price charged by Red Star is \$140 (including shipment cost). Any jackets leftover at the end of the season can be sold to an outlet chain at \$100 per unit. Based on the estimates of the Sales Department, demand for the Jacket has a normal distribution with a mean of 3, 000 and a standard deviation of 500.

Please use Newsboy model with continuous demand to answer the following two Independent questions.

(a). In order to determine the optimal order quantity from Red Star, please find the underage cost and the overage cost. What is the SSL (customer service level)? (1 point) (b). Suppose Yankee can order from a local US supplier Blue Star at a unit wholesale price of \$180 (including shipment cost) during the selling season.

In this case, Yankee will place a first order to Red Star before the selling season.

During the selling season, if demand is larger than the first order quantity, Yankee will place a second order to Blue Star to make up for the shortfall. (Blue Star can respond quickly without causing any significant delay to the customers of Yankee.) If demand is less than the first order quantity, no second order will be placed and the leftover jackets will be sold to discount chain at a unit price of \$100 as before.

In order to determine the optimal order quantity from Red Star, please find the underage cost and the overage cost.

What is the SSL (customer service level)? (1 point) 3. A company supplies medical equipment. One of its products, an oxygen pump, is imported from Germany and has a three-week lead-time. On average the company sells 5 of these pumps each week, with a standard deviation of 1. 1 .

The company orders a batch of 62 of these pumps at a time. Currently it places an order whenever the inventory level falls to 20. What is the cycle service level? (1 point) 4.