**Supply chain management 465131**

**Assignment 2**

**Question)** Assume XYZ company uses a continuous review policy for replenishing its products. Demand for the product is normally distributed, with a mean of 600 units per day and a standard deviation of 140 units per day. The lead time is one day. The current replenishment policy is to order 1,000 units when there are 800 units on hand.

1. What is the cycle service level that XYZ company achieves with its policy?
2. What change in fill rate would XYZ company achieve if it increased its reorder point from 800 to 900?
3. If the policy of the company to achieve a fill rate of 92.2 percent. What reorder point should it use?
4. If the company aims to maintain the same safety inventory, what is the impact of the lot size on fill rate and cycle service level? Explain your answer?