

Exercise 3

Name: _____

You need 50,000 units per year of a given part, and that part costs you \$4 per unit. In addition to purchasing cost, every order for that part has a fixed administrative cost of \$800 (regardless of order size). Assuming an inventory holding cost of 30% per annum, what is the optimal number of inventory turns per year?

Exercise 4

A warehouse facing a weekly customer demand $N(100,20)$ replenishes its stock every month from a vendor with a 2 week delivery lead-time. What is the order-up-to level required to achieve a service level of 99%?