Demand of a bulk material has an average of 1000 tons per day.

Standard deviation of the daily demand is 200 tons.

Lead time is 9 days.

Assuming that the management is willing to have a service level of 90%

Safety stock is

If average demand during the lead time is 1000 and standard deviation of demand during lead time is 200. The reorder point at 95% service level is

Ventura Health System operates nine hospitals. The annual demand of a specific supply, its ordering cost, and its carrying cost are the same for all hospitals.If orders are placed through a centralized system for all hospitals the carrying cost remains the same. But centralized ordering cost will be four times

ordering cost of each hospital.

The Decentralized inventory system parameters are : D, H, and S.

The Centralized inventory system parameters are 9D, H, and 4S.

Suppose:

EOQ for **EACH** hospital is shown by EOQDh , and

EOQ for **ALL** hospitals is shown by EOQC

What is the quantitative relationship between EOQC and EOQDh.

A) EOQC = 9EOQDh

B) EOQC = 6EOQDh

C) EOQC = 3EOQDh

D) EOQC = 1.5 EOQDh

E) none of the above

Suppose: TCC is the total cost of the centralized system and TCD is the total cost of the decentralized system **added up** for **ALL** nine hospitals. Fill the following with a quantitative value

A) TCD = 9 TCC

B) TCD = 6 TCC

C) TCD = 3 TCC

D) TCD = 1.5 TCC

E) none of the above