Production

Pear, Inc. assembles smart phones at rate of 240/hour. Demand for next year is forecasted to be 120,000 units. If holding costs are $18 per unit and set-up costs (same as ordering costs) are $20 per set-up. The company operates 8 hour days, seven days a week, and 365 days a year.

a. How Many Units should be produced in one production run (Qrun)?

b. What is the maximum inventory (Qmax)?

c. What is average inventory (Qavg)?

d. How many production runs will be required to satisfy annual demand (N)?

e. What is the annual Total Cost using a production model (TC)?