Forecast	250	300	250	300

7. SummerFun, Inc., produces a variety of recreation and leisure products. The production manager has developed an aggregate forecast:

Month	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Forecast	50	44	55	60	50	40	51	350

Use the following information to develop aggregate plans.

Regular production cost	$80 per unit	Back-order cost	$20 per unit
Overtime production cost	$120 per unit	Beginning inventory	0 units
Regular capacity	40 units per month		
Overtime capacity	8 units per month		
Subcontracting cost	$140 per unit		
Subcontracting capacity	12 units per month		
Holding cost	$10 per unit per month		

Develop an aggregate plan using each of the following guidelines and compute the total cost for each plan. Which plan has the lowest total cost?

a. Use regular production. Supplement using inventory, overtime, and subcontracting as needed. No backlogs allowed.

b. Use a level strategy. Use a combination of backlogs, subcontracting, and inventory to handle variations in demand.

8. Nowjuice, Inc., produces Shakewell® fruit juice. A planner has developed an aggregate forecast for demand (in cases) for the next six months.