Class 9 Questions

These questions could show up on your in-class quizzes and examinations. They are drawn from the following resources:

- Chapters 1-6 - *An Introduction to Business*
- Slides and notes from Classes 1-7
- Foundation student Guide 2009 (p. 3-31)
- Rehearsal Simulation Rounds 1, 2, 3, and 4
- Manager’s Guide (Foundation web site under “Help”)

The questions will have multiple choice alternatives that you have to anticipate. “Correct” answers will not be posted. You are encouraged to work with other students to build a complete understanding of all of the possible answers to these questions.

From the Production Management Analysis:

Variations of these questions could be asked with respect to specific companies using information from Page 4 of a FastTrack report.

1. What is your overtime labor cost per unit at an automation rating of 6?

2. How much will your labor cost go down if you increase your automation from 3 to 7? (assume no overtime)

3. For which company is managing the amount of overtime the greatest concern?

4. For which company is managing the amount of overtime the least concern?

5. What will Able’s contribution margin (expressed as a percentage) be if automation was changed from 3 to 6? (assume no overtime)

6. Able is currently selling for $34. They expect to sell 1,000 units. The material cost per unit is $12.00. Able’s automation will be 7 next year. Assuming no overtime (and no inventory carrying costs), what will Able’s contribution margin (as a total dollar amount) be?
Investments in Capacity to compete

7. You are creating a new product ABLER and want to build a very efficient factory to produce it. Since ABLER will compete in the High Tech market, you think that an automation level of 4 would be the best. You want your factory to have a capacity of 800,000 units. How much will you have to invest in the machinery for ABLER’s factory? What will the labor cost per unit be if you produce 800 units? What will the labor cost per unit be if you produce 1,600 units?

8. You have a production line for an existing product. The capacity is for 1,000 units with an automation level of 3. The per-unit cost of adding capacity is $6 for floor space and $4 per level of automation. If you increase the automation from 3 to 6 for the current capacity, what will that cost?

9. Your current factory has a capacity of 700 units at an automation level of 4. What size investment would be required to bring the capacity to 1,100 at the same level of automation?

10. You are adding a new product and want the factory to have a capacity of 1,000 units at an automation level of 6. What size investment would be required to build this factory?

11. Your product Able was your star performer. At one point you were selling 2,200 units a year and you built a factory with a capacity of 1,200 units at an automation rating of 7. However, now Able has seen better days. Last year you only sold 1,300 units and don’t believe that it will ever sell more than 1,400 a year. You decide to reduce the capacity for Able to 800 units. How much cash will you receive?

12. At the end of the year, you have 600 units of product ABYSS in left in inventory; each unit cost $20 to produce. Your gut reaction is that you need to discontinue this product. ABYSS’s factory has a capacity of 500 units at an automation level of 6. If you decide to discontinue this product, how much money will you get for the factory? How much will you get for the inventory?

13. You have a production line for an existing product. The capacity is for 1,000 units with an automation level of 3. The per-unit cost of adding capacity is $6 for floor space and $4 per level of automation. If you increase the automation from 3 to 6 for the current capacity, what will that cost?

14. You have a production line for an existing product. The capacity is for 1,000 units with an automation level of 4. The per-unit cost of adding capacity is $6 for floor space and $4 per
level of automation. If you double your current capacity at the same automation level, what will that cost?

15. In Foundation, what decisions can you make to increase your contribution margin (as a percentage of sales)?

16. In Foundation, what decision can you make to increase your contribution margin (as a percentage of sales) that will not have a negative impact on your sales volume?