Lesson 2-1 Practice Quiz

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June 6, 2016

## Lesson 2-1 Practice Quiz

5/5 points earned (100%)

**Excellent!**

*Correct - 1/1 points*

1. A common difference between the features of products produced using a job shop process arrangement and an assembly line process arrangement is degree of product standardization.

**True**

Correct Response  
Job shop is a process-based arrangement that is suitable for making several types of products. Assembly line is a product-based arrangement that is suitable for making very limited varieties of products. Further, job shops support customization of products, while assembly lines support standardization.

False

*Correct - 1/1 points* 2. An assembly line arrangement has high fixed costs and low variable costs.

**True**

Correct Response   
Assembly lines are made up of several small activities into which a large process is broken down and which are paced, usually using a conveyor belt. Assembly lines usually require significant capital investment, often use low-skilled workers, and are focused on high volume and low variable costs.

False

*Correct 1/1 points* 3. The design of products – goods and services – is separate and distinct from the design of processes used to produce the products. The two aspects – design of products and design of processes – should be treated independently.

True

**False**

Correct Response   
Product requirements, derived from customer needs, include features such as price, degree of customization, and delivery speed. Process design dictates the ability of the process to make and deliver such product requirements. Thus, product design and the design of processes to make and deliver those products should not be treated independently.

*Correct - 1/1 points* 4. The process for checkups at a dentist's office consists of three steps for every patient – check-in, which takes an average of 1 minute, cleaning by the hygienist, which takes an average of 24 minutes, and examination by the dentist, which takes an average of 10 minutes. Thus, the average flow rate of the process is 6 patients per hour.

True

**False**

Correct Response   
Among the three activities, cleaning by the hygienist is the bottleneck task as it has the highest average cycle time of 24 minutes. The average flow rate of that task is 1 divided by 24 patients per minute, which translates to 2.5 patients per hour, and which will also be the average flow rate of the process.

*Correct - 1/1 points* 5. The software development department of a large insurance company completes, on average, 50 projects per year. Usually, there are 39 projects being worked on in the department at any time. Thus, it appears that the average project completion time is less than six months.

True

**False**

Correct Response   
Average Inventory (I) = 39 projects, Flow Rate (R) = 50 projects/year. Applying Little's law, Average Flow Time (T) = I/R = 39/50 = 0.78 per year, which equals 9.36 months. It appears that the average project completion time is greater than 9 months.