The Model T and Productivity

Explain how each of the following changes in the production of the Model T helped Henry Ford increase productivity. Frame your response in terms of reductions in input and increases in output.

- 1. The standardization of parts reduced the amount of time workers (human capital) had to spend making auto parts fit together and made it possible to operate the assembly line. This reduced the input required per unit of output.
- 2. Expanding operation of the Highland Park Plant to 3 shifts a day maximized the number of cars produced in the factory. Output for the plant (input) increased.
- 3. Offering the Model T in only one color reduced the worker time needed to make a car since the workers did not have to spend time on set up for paint color changes. This reduced input per unit of output.
- 4. Instituting the \$5 day attracted more skilled workers and helped Ford retain them. Interruptions on the assembly line due to absenteeism were dramatically reduced. In addition, workers were motivated to work hard to keep their high-paying jobs. Output per worker (input) increased.
- 5. Establishing rules on worker gambling helped keep workers focused on their jobs when at work. Output per worker increased.
- 6. Building a factory with windows that provided lots of natural lighting made it easier for workers to do their job and reduced mistakes. Workers could work faster yet fewer resources were wasted due to errors. Input (natural resources) needed to make cars was reduced and output per worker (input)) was increased.
- 7. Designing a machine that makes a part faster than workers could make it by hand reduced the number of workers (human capital) needed for specific tasks. The input needed per output was reduced.
- 8. Buying a rubber plantation helped Ford make sure he had a natural resource he needed to produce the Model T. By controlling the manufacturer of rubber, he reduced the chance the assembly line would be disrupted and workers would be idle. Output per worker (input) was increased.
- 9. Buying ships was another way Ford made sure work on the assembly line was not interrupted. He could make sure he had all the natural resources when they were needed. Output per worker (input) was increased.
- 10. Operating an iron foundry next to the factory where vehicles are assembled also helped insure continuous operation of the assembly line. Output per worker (input) was increased.