**Imagine you are speaking to a professional unfamiliar with Lean, Six Sigma, or Lean Six Sigma.**

* To the best of your ability, define or explain ‘Lean’ (feel free to use bullet points)
* Focused on minimizing waste
* From TPS
* Focused on continuous improvement, kaizens.
* Uses tools such as 5S, mapping, etc.
* To the best of your ability, define or explain ‘Six Sigma’ (feel free to use bullet points)
* Developed by Motorola and GE.
* A approach focusing on reducing defects/rejects.
* Utilizes DMAIC.
* To the best of your ability, define or explain ‘Lean Six Sigma’ (feel free to use bullet points)
* A combination of both lean and six sigma.
* Aimed to improve efficiency and quality at the same time

Fundamental Purpose of each Lean Tool

1. Value Analysis – Customer value added is when there is a direct reason for the customer to potentially fund the change. Non-value added is when there isn’t necessarily a direct customer value added.
2. Value-stream mappings – The process of mapping a process to identify where there is potential for value to be added. You’ll design a map of the current flow and a new map for the updated process.
3. Takt Time – The required duration to assemble an item.
4. Line Balancing – The process of identifying which steps take the longest and which take the shorter. By identifying the longest you can reduce these and increase your thruput.
5. Gradual Inventory Reduction – Reducing inventory gradually is beneficial because if you get caught in a bind it will likely be less severe than a rapid reduction.
6. Pull System – A system that responds to customers demand for production capacity. I.e. customer order x we then produce x.
7. Cellular Manufacturing – producing items in a cell or area, this area is specialized in producing the item.
8. Poke Yoke – Mistake proofing, we will put in place processes to make mistakes nearly impossible.
9. 5 Whys/Fishbone Diagram – Root cause analysis, help you identify root causes.
10. 5S – Standardization helps you standardize and reduce customer complaints.
11. Setup Reduction - Changeover time, reducing the setup time will allow us to setup more quickly, producing less products at a time.