Answer the question in 3-5 sentences and expound or justify your answer by citing an example.
Why do you think it is important for an engineer to follow the basic steps in problem solving?

I think it is important for an engineer to follow the basic steps in problem solving because this serves as the logical structure to organize their ideas and perform their solutions, making sure that these are applicable and feasible to the problem they're looking to solve. By following these steps, from defining, simplifying, solving, and verifying the problem, an engineer can have an accurate and consistent workflow in making solutions, while also reducing errors, suboptimal designs, and excess time and effort, thus reducing the chances of failure. When making a solution, analysis and verification makes sure it meets the necessary requirements and standards, and fulfills its intended goal and outcome. For example, in developing a program for Windows, verifying the program through debugging and testing in various environments and configurations allows for a reliable and optimized application that can be used in a real-world setup.