

The following sentences are some skills required for industrial engineering jobs, try to find out the name of each skill based on the definitions provided, and then determine which ones are hard skills and which are soft:

- a) **Creativity** Industrial engineers use creativity and ingenuity to design new production processes in many kinds of settings in order to reduce the use of material resources, time, or labor while accomplishing the same goal. (**Soft**)
- b) **Critical thinking** Industrial engineers create new systems to solve problems related to waste and inefficiency. Solving these problems requires logic and reasoning to identify strengths and weaknesses of alternative solutions, conclusions, or approaches to the problems. (**Soft**)
- c) **Listening skills** These engineers often operate in teams, but they also must solicit feedback from customers, vendors, and production staff. They must listen to customers and clients in order to fully grasp ideas and problems. (**Soft**)
- d) **Mathematics** Industrial engineers use the principles of calculus, trigonometry, and other advanced topics in mathematics for analysis, design, and troubleshooting in their work. (**Hard**)
- e) **Problem solving** In designing facilities for manufacturing and processes for providing services, these engineers deal with several issues at once, from workers' safety to quality assurance. (**soft**)
- f) **Speaking skills** Industrial engineers sometimes have to explain their instructions to production staff or technicians before they can make written instructions available. Being able to explain concepts clearly and quickly is crucial to preventing costly mistakes and loss of time. (**Soft**)
- g) **Writing skills** Industrial engineers must prepare documentation for other engineers or scientists, or for future reference. The documentation must be coherent and explain their thinking clearly so that the others can understand the information. (**Soft**)

- h) **Production and processing** Industrial engineers must be able to use a methodology that allows organizations to “maximize shareholder value by the fastest rate of improvement in customer satisfaction, cost, quality, process, speed, and invested capital. **(Hard)**