



Problem 1: Qualitek is a company that makes industrial pins. There are usually six machines available, and the six machines can make a total of 300 pins in eight days. The company received an order for 300 industrial pins, but one-half of the machines are down for maintenance. How long will it take to complete the job with the three available machines?

Problem 2: Qualitek received a new order for 1,500 industrial pins, but two of the three machines are scheduled for use on another project. How long will it take to complete the job with only one machine?

Problem 3: The customer who ordered 1,500 industrial pins needs the job completed in 20 days. How many machines are required to complete the job in 20 days?