

- Two different part types arrive at the same system for processing. Part Type 1 arrives according to a lognormal distribution with a log mean of 11.5 hours and log standard deviation of 2.0 hours (note that these values are the mean and standard deviation of this lognormal random variable itself). These arriving parts wait in a queue designated for Part Type 1's only until an operator is available to process them. The processing time follows a triangular distribution with parameters 5, 6, and 8 hours. Part Type 2 arrives according to an exponential distribution with mean of 15 hours. These parts wait in a second queue until the same operator is available to process them. The processing time follows a triangular distribution with parameters 3, 7, and 8 hours. After being processed by the operator, all parts are sent for processing to a second operation that requires a new operator, which has processing time distributed as triangular with parameters of 4, 6 and 8 hours. Run the simulation for 5,000 hours.