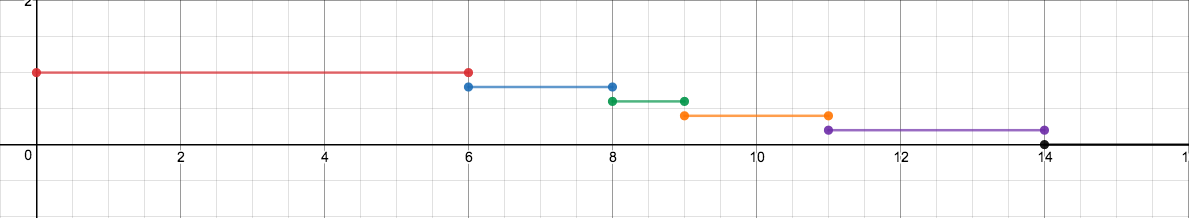
1. Suppose that you own a wind farm with five wind turbines of the same type, and suppose that you have kept the records of their first failure times , which are 14, 6, 8, 11, and 9 months.
2. Draw the sample (empirical) reliability function.



1. Calculate the area under the empirical reliability function.
2. Calculate the sample mean of the data.
3. Construct a (asymptotic) confidence interval for the population MTTF (mean time to failure) when someone has told you that, based on historical records, the population variance is 9.

Therefore, the 95% confidence interval is

1. Calculate the sample standard deviation of the data.
2. Construct a (asymptotic) confidence interval for the population MTTF when no information about the population variance is available.

Therefore, the 95% interval is