



## Exponential Distribution Problems

1. What is the probability that an exponential random variable with a mean of 5 will be less than 2?
2. If the average time between events is 10 minutes, what is the probability that the next event will occur in less than 3 minutes?
3. What is the probability that an exponential random variable with a mean of 8 will be greater than 12?
4. If a company expects an average of 4 defects per day, what is the probability of having no more than 2 defects on a given day?
5. What is the probability that an exponential random variable with a mean of 6 will take less than 4 units of time?





