Sri Lanka Institute of Information

Technology



Lab Submission

Lab Sheet 07

**IT24103921**

**Samarawickrama N. A. N. D**

**Probability and Statistics | IT2120**

B.Sc. (Hons) in Information Technology

**Exercise :**

1. A train arrives at a station uniformly between 8:00 a.m. and 8:40 a.m. Let the random variable X represent the number of minutes the train arrives after 8:00 a.m. What is the probability that the train arrives between 8:10 a.m. and 8:25 a.m.?



1. The time (in hours) to complete a software update is exponentially distributed with rate. Find the probability that an update will take at most 2 hours.



1. Suppose IQ scores are normally distributed with a mean of 100 and a standard deviation of 15.
   1. What is the probability that a randomly selected person has an IQ above 130?



* 1. What IQ score represents the 95th percentile?

