

Week 2 Preparation

Next week we will look at *Reliability Theory* and *Inventory Systems*. It is important that you prepare for this session. An understanding of *Integration* and *Differentiation* is expected. For example:

- Basic knowledge of the negative exponential distribution. If $f(t) = -\lambda te^{-\lambda t}$:

$$E(t) = \frac{1}{\lambda}$$

- Differentiation. Aim to be comfortable with expressions such as:

$$\frac{df(x)}{dx}$$

- Integration. Aim to be comfortable with expressions such as:

$$\int f(x)dx$$

Feel free to arrange to see me if need be.

Suggested Reading:

- <http://www.cardiff.ac.uk/mathssupport>
- CALCULUS Early Transcendentals, James Stewart