



Q 2: A manufacturer claims that the average life of its light bulb is 1,200 hours. Determine the probability the mean life time of a random sample of 49 bulbs will be at least 1,180 hours

Q 3: The life time in hours of a semiconductors laser has a lognormal distribution with  $\theta = 10$  &  $\omega = 1.5$ .

1. What is the probability that the lifetime is more than 10000 hours?

2. What lifetime is exceeded by 99% of lasers?