

Question 15**(9 marks)**

An experiment was conducted to measure how quickly adults respond to the request: 'send me a text message'.

Let T = the number of hours taken for an adult to respond and send a text message.

It was found that the distribution of the population of response times for adults was given by the probability density function shown below, with mean $\mu = 3$ hours and standard deviation $\sigma = 2.4$ hours.

