3 The times taken, in minutes, for trains to travel between Alphaton and Beeton are normally distributed with mean 140 and standard deviation 12.

(i) Find the probability that a randomly chosen train will take less than 132 minutes to travel between Alphaton and Beeton. [3]

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(ii) The probability that a randomly chosen train takes more than k minutes to travel between Alphaton and Beeton is 0.675. Find the value of k. [3]

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