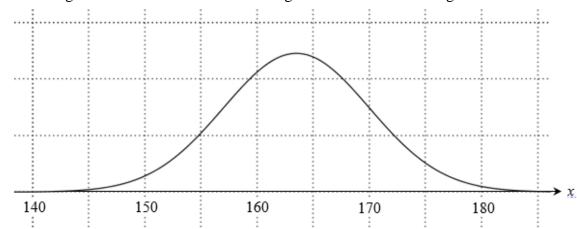
(a) The heights of English men aged 25 to 34 are normally distributed with mean 178 cm and standard deviation 8 cm.

[3]

Three English men aged 25 to 34 are chosen at random.

Find the probability that all three men have a height less than 194 cm.

(b) The diagram shows the distribution of heights of Scottish women aged 25 to 34.



The distribution is approximately normal. Use the diagram in the Printed Answer Booklet to estimate the standard deviation of these heights, explaining your method. [3]