3 The heights of the 124 Senior members of the Giraffes basketball club are normally distributed with mean 187.4 cm and standard deviation 6.4 cm.

(a) How many members of the club would you expect to have heights within 5 cm of the mean? [4]

The heights of the Junior members of the Giraffes club are normally distributed with mean 172.7 cm and standard deviation σ cm. 23% of these members have height less than 170.3 cm.

(b) Find the value of σ. [3]