2   The lengths of the tails of adult raccoons of a certain species are normally distributed with mean 28 cm and standard deviation 3.3 cm.

(a) Find the probability that a randomly chosen adult raccoon of this species has a tail length between 23 cm and 35 cm. [4]

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The masses of adult raccoons of this species are normally distributed with mean 8.5 kg and standard deviation σ kg. 75% of adult raccoons of this species have mass greater than 7.6 kg.

(b) Find the value of σ. [3]

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