

IB Statistics and Probability Problem 014

The heights in a group of seven-year-old children are normally distributed with a mean of 117 cm and a standard deviation of 5 cm . A child is chosen at random from this group.

- A. Find the probability that this child is taller than 122.5 cm .
- B. The probability that this child is shorter than $k\text{ cm}$ is 0.65 . Find the value of k .