

# IS606 - Homework 4

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## 4.4 Heights of adults (p204)

*Researchers studying anthropometry collected body girth measurements and skeletal diameter measurements, as well as age, weight, height and gender, for 507 physically active individuals.*

**a) What is the point estimate for the average height of active individuals? What about the median?** The mean would be the point estimate for the average height, which is 171.1. The median is 170.3.

**b) What is the point estimate for the standard deviation of the heights of active individuals? What about the IQR?** Given the distribution is mostly normal, we can use the sample standard deviation as the point estimate for the population standard deviation (p173),  $SD=9.4$ .

The IQR would be derived from the sample IQR of  $Q3 - Q1 = 177.8 - 163.8 = 14$ .

4.14 (p)

4.24 (p)

4.26 (p)

4.34 (p)

4.40 (p)

4.48 (p)