A screenshot of a graph

Description automatically generated1)

b. this data gives us no information on whether or not healthy men walk straight; cadence refers to the number of strides per second and appears to be unrelated to whether or not they walked straight.

The given target cadence value is is 0.85 with a standard deviation of 0.1, so our values do indeed fall within that value (our mean, since there are no outliers, is 0.9255, which is within 0.1 of the target cadence value).

A screenshot of a graph

Description automatically generated

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Description automatically generated

c)

the aortic root diameter indeed differs between males and females. The mean value for males is 3.63 and the mean value for females is 3.28, meaning males generally have larger aortic root diameters.

On the other hand, the spread for the female data (both the standard deviation and IQR) is slightly greater than that of the male data. This can be seen from the graph; the females have a peak at around 3.15 and sparse values all around, while the males have pretty consistent values from 4 to 3.4.