AP Stats

Chapter 1 1.2 (day 2) HW

Who's Taller?

Who is taller, males or females? A sample of 14-year-olds from the United Kingdom was randomly selected using the CensusAtSchool Web site. Here are the heights of the students (in cm):

Male:

154, 157, 187, 163, 167, 159, 169, 162, 176, 177, 151, 175, 174, 165, 165, 183, 180

17

8.5

Female:

160, 169, 152, 167, 164, 163, 160, 163, 169, 157, 158, 153, 161, 165, 165, 159, 168, 153,

166, 158, 158, 166

22

11

1. Construct a stemplot for male heights.

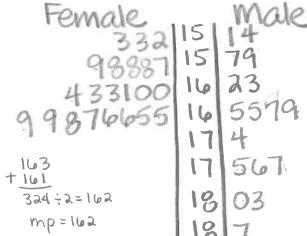
2. Construct a split stemplot for male heights.

female 15 | 23378889 16 | 00133455667899

Key: 15/2 represents a female who is 152 cm tall

> 5 233 15 78889 16 001 334 16 55667899

3. Construct a back to back stemplot comparing male and female heights.



Key:15/7 represents a student who is 157 cm tall

mp=167

- C: The overall height of male 14 year old U.K. residents is higher than female 14 year old UK residents. The center (midpoint) for males was greater (@167cm) than females (@162cm).
- U: For both males and females, there does not appear to be any potential outliers.
- S: The shape of female distribution is left skewed & unimodal, while the male distribution of heights in cm is roughly symmetric of unimodal.
- S: The height in cm of UK males varies more (from 151 cm to 187 cm) than UK females (from 152 cm to 169 cm).