

Section
2.2

A First Look at Statistical Inference

PART I

Recall: The Process of Statistical Analysis

- ① Identify the research question; ② Decide what to measure; ③ Gather Data;
- ④ Summarize Data, and ⑤ Make a statistical inference.

→ Through stacked dotplots.

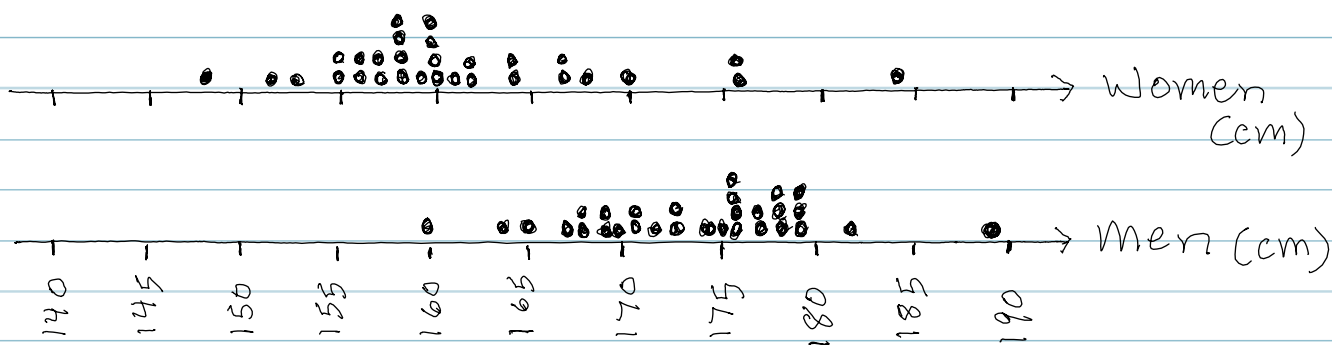
→ Comparing 2 Samples with Stacked Dotplots

Adult Women's Heights (cm)

{ 148 152 155 153 155 156 157 158 158 156 }
 { 159 160 164 158 160 161 162 158 160 157 }
 { 162 160 167 167 168 164 170 176 176 184 }

Adult Men's Heights (cm)

{ 168 164 160 165 167 171 171 169 169 172 }
 { 168 173 170 176 174 173 178 179 177 176 }
 { 179 175 176 182 178 179 176 178 177 189 }



Steps to inference:

- 1) Hypothesis (conjecture): The average height of men is taller than the average height of women.
- 2) Summary Values: Approximate averages from samples: women: 162cm, men: 174cm.