

## Histograms & Stemplots

## Math 121 - Workshop

Presented with recordings of a pair of people of the same sex speaking the same phrase, can a listener determine which speaker is taller simply from the sound of their voice? Twenty four young adults at Washington University listened to 100 pairs of speakers, and within each pair of speakers were asked to indicate which of the two speaker was the taller. Here are the number correct (out of 100) for each of the 24 participants:

49 53 56 56 56 58 58 58 59 61 61 62  
63 65 65 66 67 67 67 68 68 69 70 70

1. Make a stemplot for the data above with splitting (so that numbers ending 0-4 are on a separate stem from numbers ending 5-9).
2. Make a histogram showing the distribution of the data above.
3. Describe the shape of the distribution. Is it skewed left, right? Is it roughly symmetric?
4. Does it look like voices contain clues about who is taller, or do you think the participants are just guessing?