Variability

Let's understand variability in situations.

12.1 Estimate: Average Book Length



The book in the center is 276 pages long. What is the mean number of pages of the 3 books?

1. Record an estimate that is:

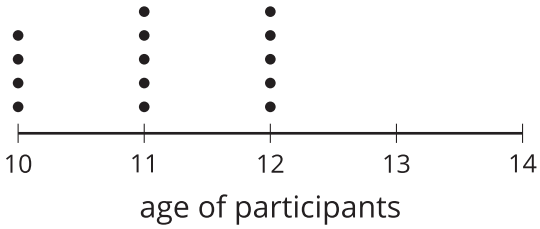
too low	about right	too high

2. Explain your reasoning.

12.2 The Better Option

Choose the best option based on the given data. Use a measure of center and measure of variability to justify your answers.

Participants' ages at Camp A



Participants' ages at Camp B

mean: 11.93 years

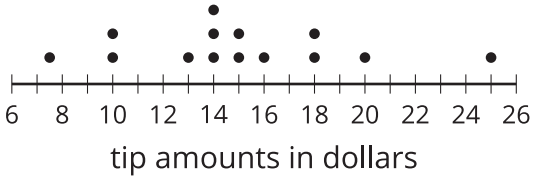
mean absolute deviation: 1.65 years

Servers' tip amounts at Restaurant A

mean: $15

mean absolute deviation: $1.5

Servers' tip amounts at Restaurant B



1. Which camp would you prefer to work for? Explain your reasoning.

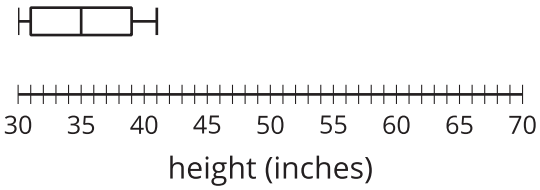
2. Which camp would you prefer to attend? Explain your reasoning.

3. At which restaurant would you want to be a server? Explain your reasoning.

12.3 Notice and Wonder: Preschool Heights

Mai and Tyler both visit the same preschool classroom and measure the heights of people in the room in inches. The summary of their results is shown in the box plot and statistics.

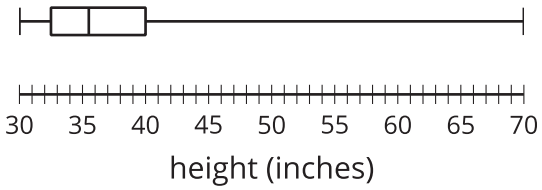
Mai's results



mean: 35.2 inches,

mean absolute deviation: 3.24 inches

Tyler's results



mean: 39.3 inches,

mean absolute deviation: 7.19 inches

What do you notice? What do you wonder?