Unit 2b-Analyzing and Comparing Data

Content Area:MathCourse(s):Math 7 Pre-Algebra HonorsTime Period:Marking Period 2Length:MP2 WK 1-3 Go Math! Advanced 2 Module 6Status:Published

Essential Questions

- How can you compare two sets of data displayed in dot plots?
- How can you compare two sets of data displayed in box plots?

Big Ideas

- Draw formal comparative inferences about two populations.
- Dot plots can be compared by the visual characteristics of spread, center and shape.
- Box plots show five key values to represent a set of data: the least and greatest values, the lower and upper quartiles, and the median.
- Using multiple samples can give an idea of the reliability of any inferences or predictions.

Enduring Understandings

Statistics and Probability

7.SP.3 Informally assess the degree of visual overlap of two numerical data distributions with similar variabilities, measuring the difference between the centers by expressing it as a multiple of a measure of variability. For example, the mean height of players on the basketball team is 10 cm greater than the mean height of players on the soccer team; about twice the variability (mean absolute deviation) on either team; on a dot plot, the separation between the two distributions of heights is noticeable.

7.SP.4 Use Measures of center and measures of variability for numerical data from random samples to draw informal comparative inferences about two populations.

Mathematical Practices Focus

2. Reason abstractly and quantitatively. Lesson 6.2, 6.3

- 3. Construct viable arguments and critique the reasoning of others. Lesson 6.2, 6.3
- 4. Model with mathematics. Lesson 6.1, 6.2, 6.3
- 5. Use appropriate tools strategically. Lesson 6.1
- 6. Attend to precision. Lesson 6.3
- 7. Look for and make use of structure. Lesson 6.1, 6.2, 6.3
- 8. Look for and express regularity in repeated reasoning. Lesson 6.1