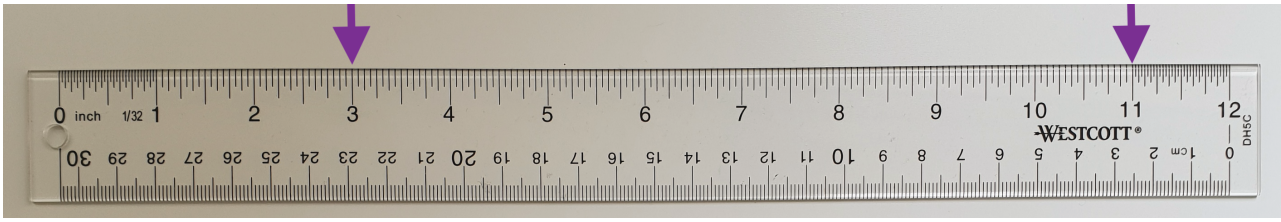
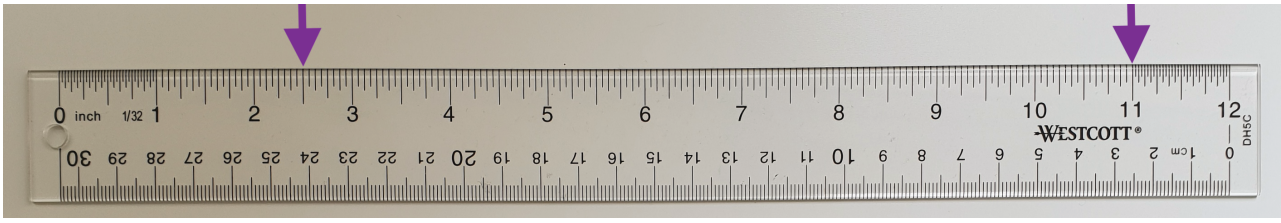
Unit 1, Lesson 16

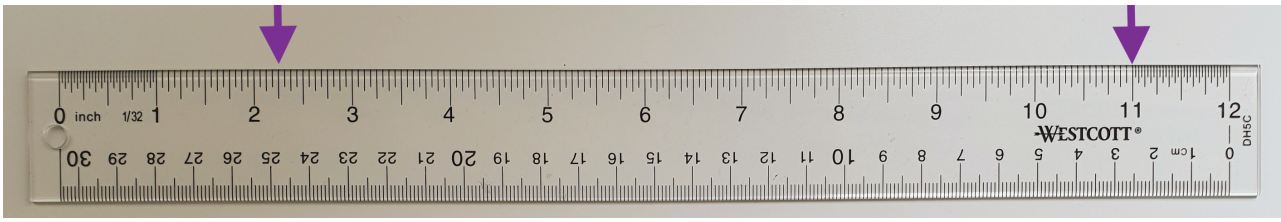
Compare and Contrast

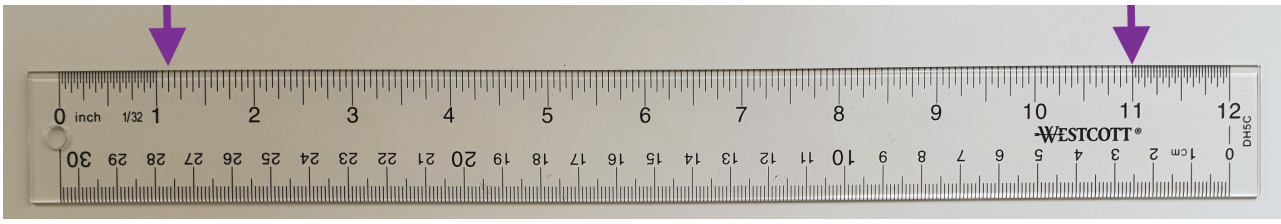
Let's analyze data.

16.1 Math Talk: Measuring Up

- 

- 

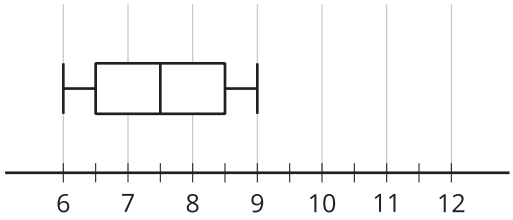
- 

- 

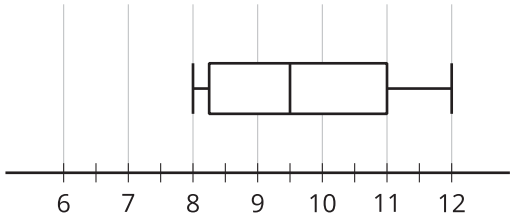
16.2 Compare and Contrast (Part 1)

Here are the shoe sizes from two cohorts in the military.

Cohort A:



Cohort B:



1. Is there any overlap between the two data sets? Explain your reasoning.

2. Which cohort has more variability?

3. Does at least one person from Cohort A have a bigger shoe size than someone from Cohort B? Explain your reasoning.

4. Compare the measures of center.

16.3 Compare and Contrast (Part 2)

Here are the shoe sizes of some 9th-grade and 12th-grade students.

9th-grade shoe sizes:

6, 8, 6.5, 7.5, 7, 6.5, 9, 6, 8.5, 7.5, 8, 10, 11, 8, 9

12th-grade shoe sizes:

10, 9, 10.5, 8.5, 10, 9, 9.5, 8, 8, 11, 9, 9.5, 11, 10.5, 8.5

1. Create a box plot, dot plot, or histogram to represent both sets of data.

2. Describe the distribution shapes.

3. Complete the table.

	mean	median	IQR	standard deviation
9th-grade shoe sizes				
12th-grade shoe sizes				

4. Does one grade's shoe sizes have more variation than the other? Explain how you know.

5. Compare the measures of center for the two sets of shoe sizes.

6. Do the distributions overlap? Use the data display you created to explain how you know.