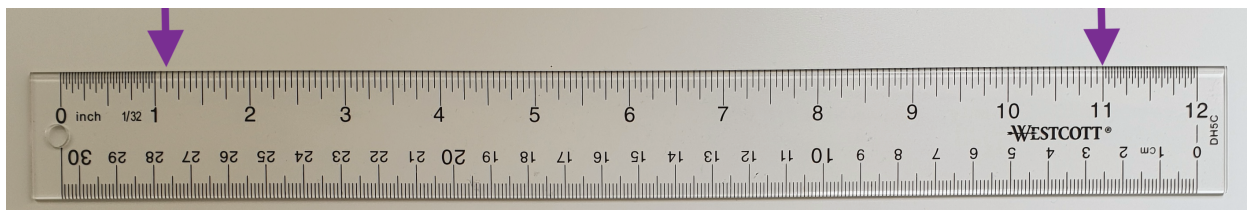
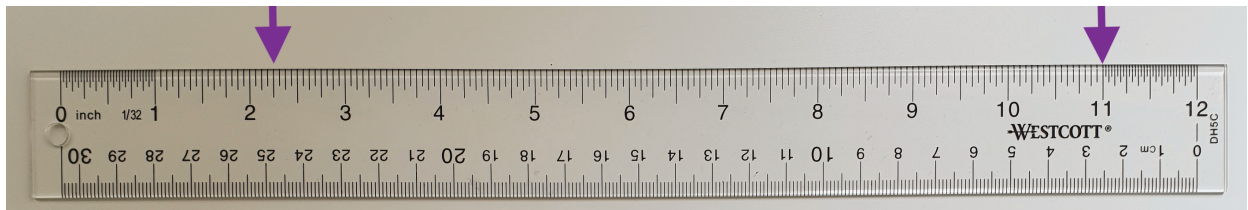
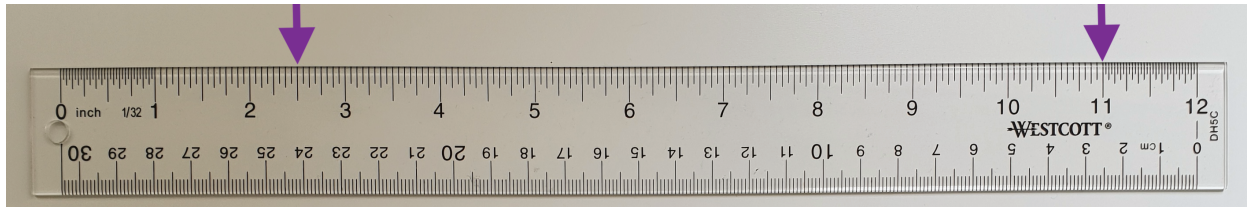
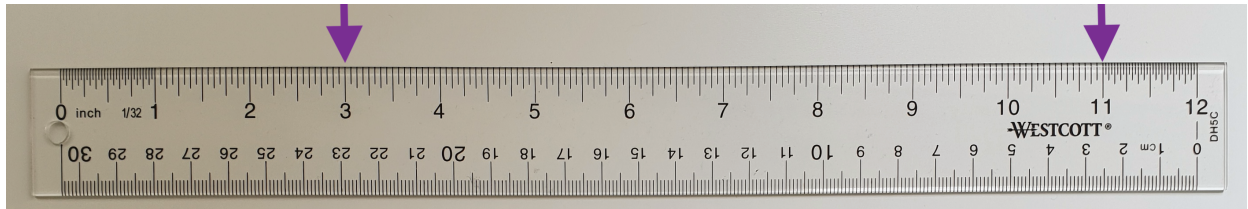


# Unit 1 Lesson 16: Compare & Contrast

## 1 Math Talk: Measuring Up (Warm up)

### Student Task Statement

What is the distance between the markings?

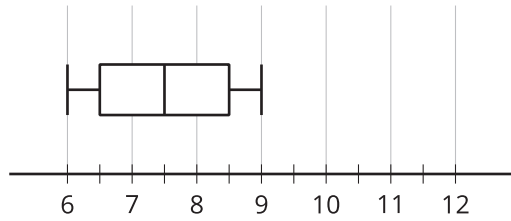


## 2 Compare & Contrast

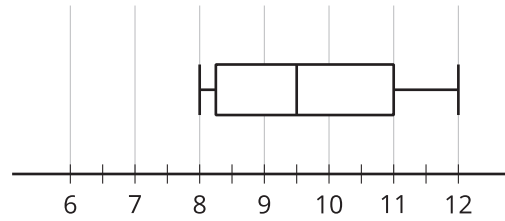
### Student Task Statement

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.

### 3 Compare & Contrast Continued

#### Student Task Statement



Here are the shoes sizes of some grade 9 and grade 12 students.

Grade 9 shoe sizes:

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

Grade 12 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 |
|---------------------|------|--------|-----|--------------------|
| grade 9 shoe sizes  |      |        |     |                    |
| grade 12 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.