

Lesson 1.2: **How many pairs of shoes do you own?**



1. How many pairs of shoes do you own? Record your answer on the board.
2. Is “Number of pairs of shoes” a categorical or quantitative variable?
3. Enter the data at [www.stapplet.com](http://www.stapplet.com). Make a dotplot, stemplot, and histogram and sketch each below.

4. Describe the distribution of the number of pairs of shoes for your class.

Shape:

Outliers (if any):

Center (typical number of shoes owned)

Variability:

5. Which of the three types of display do you prefer? Why?

6. Mrs. Cedarlund wonders if teachers have the same number of pairs of shoes as students. He asked her colleagues to record the number of pairs that they had. The results are below.

15 8 10 29 14 7 22 35 6 15 13 12 9 10

7. Enter this data at [stapplet.com](http://stapplet.com). Be sure to make 2 groups (students and teachers).

8. Make dotplots, a side-by-side stemplot, and then histograms. Copy ONE of these graphs below.

9. Compare the distributions of the number of pairs of shoes for students versus teachers. Be sure to address shape, outliers, center, and variability.

## Summary - Displaying Quantitative Data

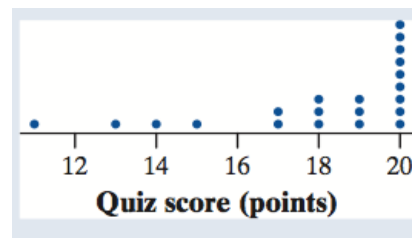
Important Ideas:

# Check Your Understanding

1. The dotplot displays the scores of 21 statistics students on a 20-point quiz.

(a) What percent of students scored higher than 16 points?

(b) Describe the shape of the distribution.



(c) Are there any potential outliers? Why?

2. Here is a back-to-back stemplot of 19 middle school students' resting pulse rates and their pulse rates after 5 minutes of running.

Write a few sentences comparing the distributions of resting and after-exercise pulse rates.

Resting		After exercise
9888	6	
8664110	7	
8862	8	6788
60	9	02245899
4	10	044
	11	8
0	12	44
	13	
	14	6

Key: 8|2 is a student whose pulse rate is 82 beats per minute.