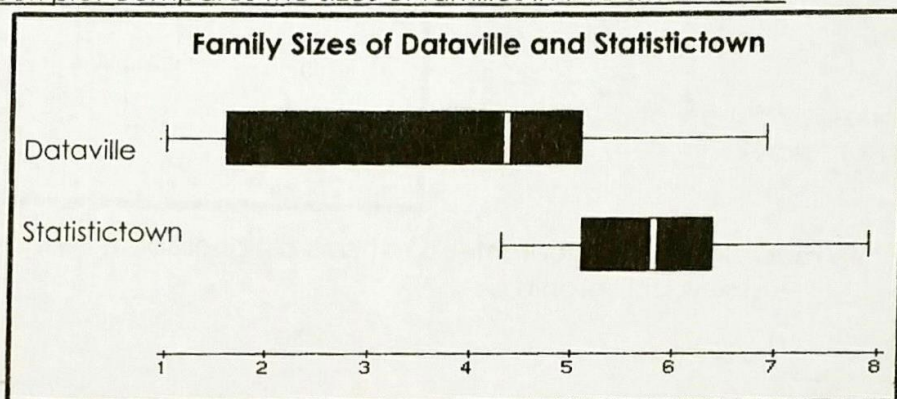# Comparing Data with

Box Plots

You can easily compare two sets of data by comparing their box plots. Just like comparing dot plots, you must make sure that the box plots have the _____ scale. Then, you can make quick estimates comparing their measures of _____ and _____!

This double box plot compares the sizes of families in two small towns.

Family Sizes of Dataville and Statistictown

Dataville

Statistictown

```
1    2    3    4    5    6    7    8
```

1) What is the 5-Number Summary for Dataville?

   a. minimum value = _____

   b. lower quartile = _____

   c. median = _____

   d. upper quartile = _____

   e. maximum value = _____

2) What is the 5-Number Summary for Statistictown?

   a. minimum value = _____

   b. lower quartile = _____

   c. median = _____

   d. upper quartile = _____

   e. maximum value = _____

3) Which town typically has smaller families?_____ Which town typically has larger families? _____

How can you tell?

4) Which town has the most variability? _____
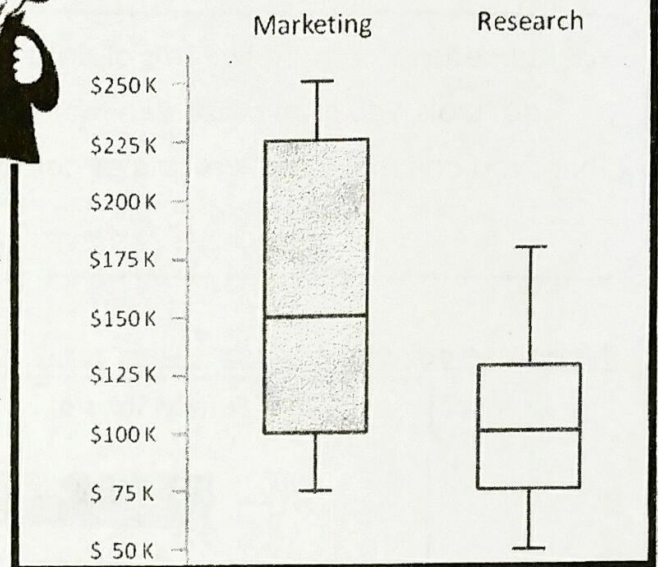
What does this mean?

Comparing Data with Box Plots Practice!

Kelin just graduated from high school. She is trying to decide whether she's more interested in studying marketing or research when she goes to college, so she is taking a look at the amount of money she can make in those two fields. The data is shown →

1) What is the MEDIAN salary for:

   marketing? _____ research?_____

2) What is the RANGE of the salaries in:

   marketing? _____ research?_____

3) Which field should Kelin study if she wants to have the best chance the highest salary?·

Base Salary Comparison

| Marketing | Research |

$250 K
$225 K
$200 K
$175 K
$150 K
$125 K
$100 K
$ 75 K
$ 50 K

4) If Kelin decides to go into marketing, is she **guaranteed** to have a higher salary than if she goes into research? _____ Justify your reasoning.

- -

Julio wants to compare the scores on his 8 math quizzes to his 10 math tests. His data is shown below:

   Julio's Test Scores: 80, 88, 100, 75, 84, 110, 90, and 80

   Julio's Quiz Scores: 89, 82, 67, 80, 90, 84, 74, 80, 60, and 83

1) Draw a double box plot to compare Julio's tests and quizzes. Include a title and appropriate scale.

2) What inferences can you make about the spread of his data?

3) What inferences can you make about the center of his data?