

## # What Can You Tell From Graphs?

1. For each city, identify the months with the highest and lowest maximum temperatures. Then, for each city, identify the months with the highest and lowest rainfall.

	Tampa	Portland
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Highest Maximum Temperature	90.1	80.2
Lowest Maximum Temperature	69.8	45.3
Highest Average Rainfall	7.7	5.9
Lowest Average Rainfall	1.7	0.6

2. In each city, where do you see the largest change in average rainfall from one month to the next month? How many inches was this change in rainfall? In each city, where do you see the largest change in average maximum temperature from one month to the next month? How many degrees was this change in temperature?

City	Changes	Difference
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Tampa	Largest change in rainfall from/to: September/October	Inches: 3.9
	Largest change in temperature from/to: October/November	Degrees: 6.7
Portland	Largest change in rainfall from/to: October/November	Inches: 2.3
	Largest change in temperature from/to: September/October	Degrees: 11

3. If you were most interested in describing the pattern of changes in the weather in a city from month to month, which type of graphs would you use? Explain why.

You should use a line graph because it is easier to see how much weather changes from month to month based on the slope of the line connecting each month.

4. Is there any variation in the seasonal rainfall patterns between Tampa and Portland? Support your answer by using information from at least two of the graphs at the end of this document.

There is no variation in the seasonal rainfall patterns between Tampa and Portland. Looking at the two line graphs measuring changes in rainfall between months for both Tampa and Portland, we can see that rainfall in Tampa increases and then decreases throughout the year, while in Portland the rainfall decreases and then increases in the year.

5. In how many months is the average rainfall in Tampa roughly 2.0 inches? In how many months is the average rainfall in Portland roughly 2.0 inches? Which graph did you use to find these answers and why?

I used the dot plot because these graphs measure the frequency of a value. For Tampa there are 5 months, while in Portland there are 4 months.

6. Using the graphs and data, how would you describe the climate (all seasons) of each city? Describe climate in these terms: rainfall through the seasons, temperature through the seasons, and the amount of variation in rainfall and temperature. Use at least three different types of graphs in writing your answer, and explain why you used each type of graph.

In terms of rainfall through the seasons, I looked at the pie charts. For Portland, it appears that most of the rainfall happens in the winter, and some in spring. There's barely anything in summer. For Tampa, the most rainfall occurs during summer and early September, from June to September.

In terms of temperature through the seasons, I looked at the line graphs to see the changes in temperature throughout the year. For Tampa, temperatures are warm throughout the year, with the low in winter being around 70-80 and highs being around 90. For Portland, the changes between season temperatures are much greater, with winter months having average temperature of 40-50 and summer months going all the way up to 80.

In terms of variations in rainfall and temperature, I looked at the dot plots and the line graphs again. For rainfall, I saw that the frequency distribution for rainfall for Tampa was much greater than Portland. In other words, Tampa has bigger rainfall variation than Portland. For temperature, I looked to the line graphs again. Tampa has less variation in temperature than Portland, with the range for Tampa being 20 degrees and Portland being 35 degrees.