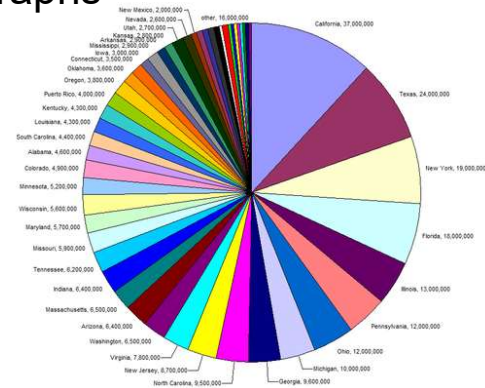


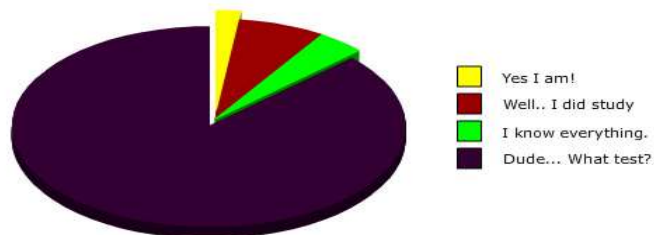
Interpreting Graphs

- ✓ Why bother with graphs?
- ✓ Line Graphs
- ✓ Constructing Line Graphs
- ✓ Bar Graphs
- ✓ Pie charts
- ✓ Scatter plots



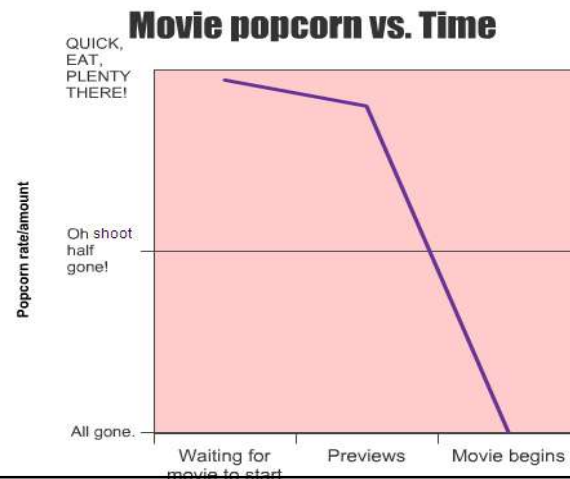
How to Interpret Graphs

Ready for the test?



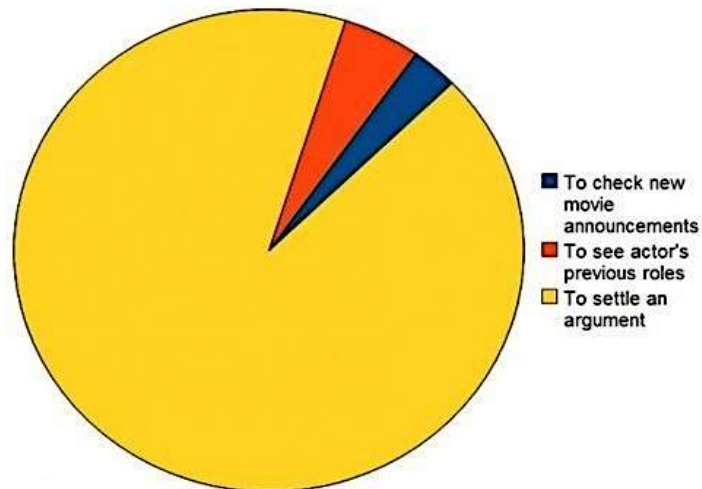
Why are graphs useful?

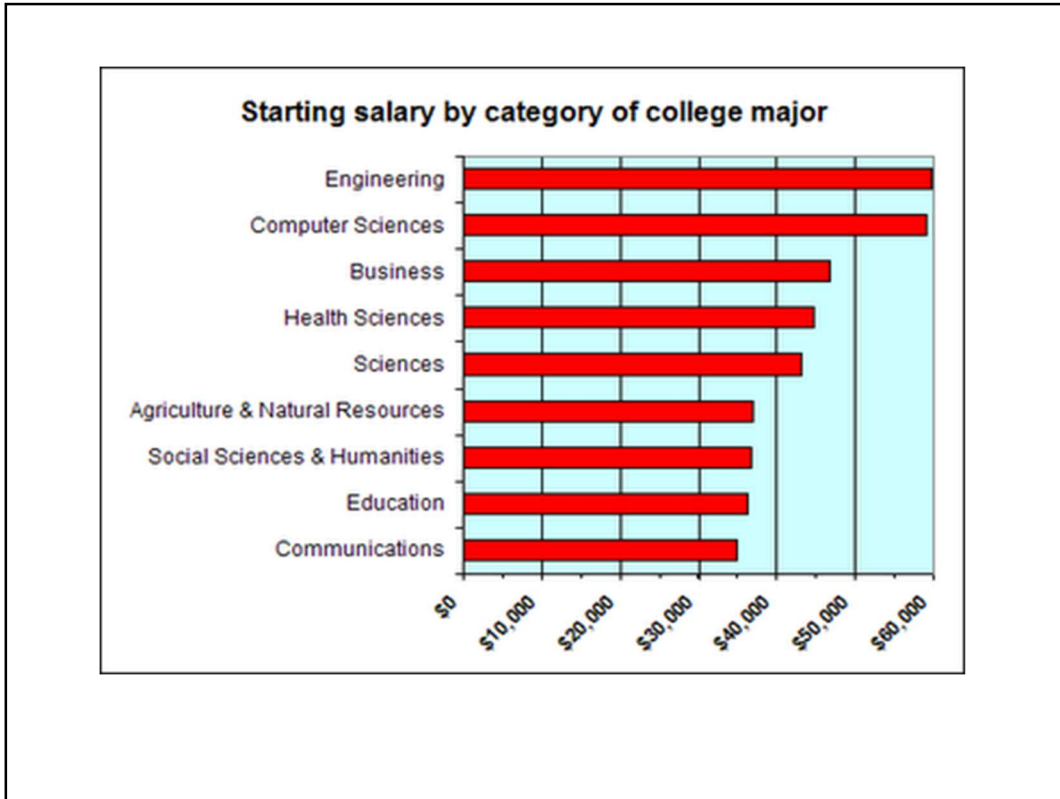
Graphs are a quick way to _____



Graphs provide a visual, as opposed to text.

Why I use IMDB





Types of Graphs

Line graphs- _____.

Bar graphs- used to _____.

Pie charts- used to compare values (_____).

Scatter plots- used to show _____ and _____ among a _____.

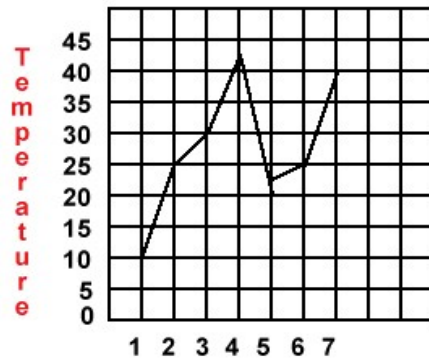
There are typically two variables that you “map out” when graphing.

-The _____ variable- what is being
_____ / _____

-The _____ (manipulated) variable- what is

_____.

This is a simple line graph charting temperature. Temperature is labeled on the "y" axis and the dates (Jan 1-7) is labeled on the "x" axis.



Average Daily Temperature for January 1-7 in Degrees Fahrenheit

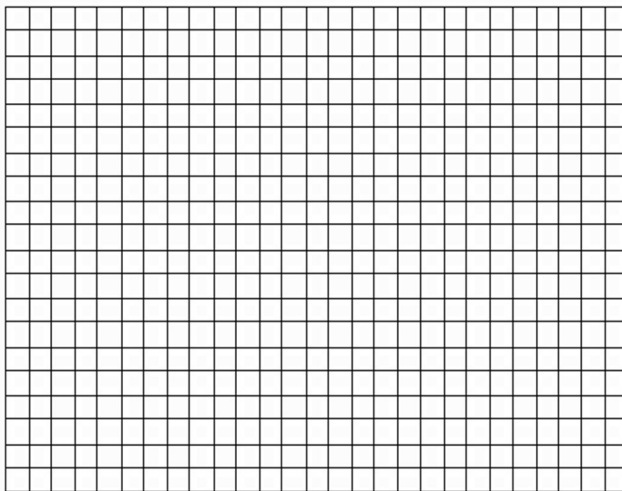
During the first week of January, which day was the coldest? _____

What was the temperature on January 7th? _____

Which day does the temperature peak?

The respondent variable is the _____, the independent variable is _____.

Practice Constructing a Line Graph



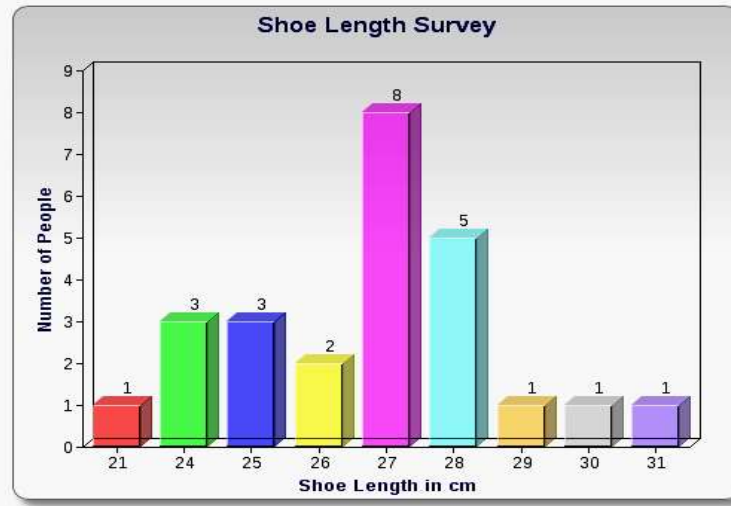
Data to graph:
Year 0 - 10 frogs
Year 5 - 20 frogs
Year 10 - 60 frogs
Year 15 - 120 frogs
Year 20 - 120 frogs

Time or trials are always placed on the x-axis

The variable goes on the Y axis.

Your numbers **MUST** be evenly spaced for accuracy.

Bar Graphs are used to _____ values.

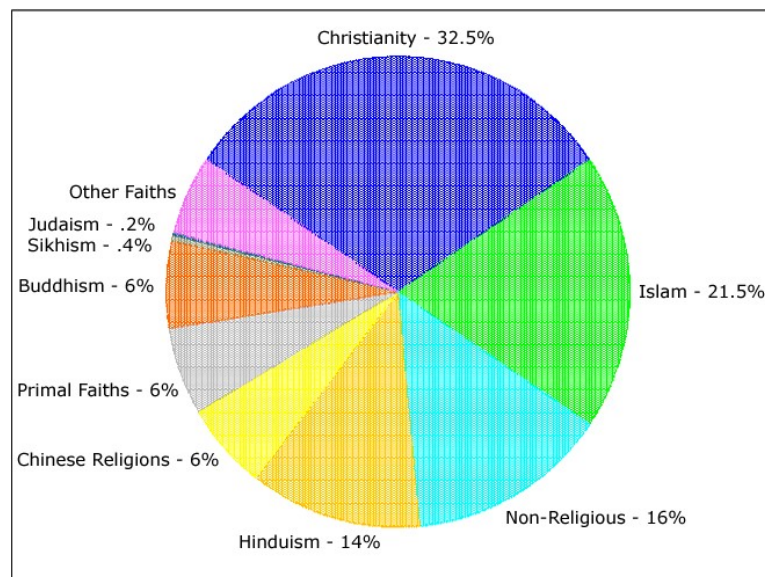


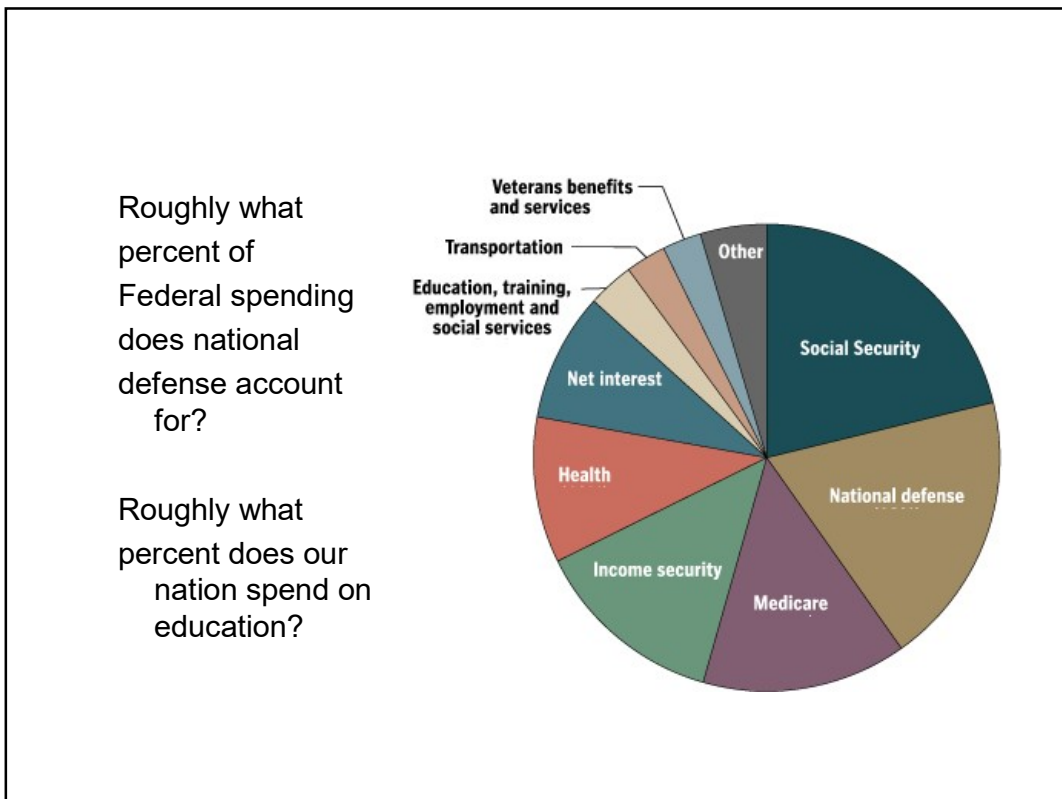
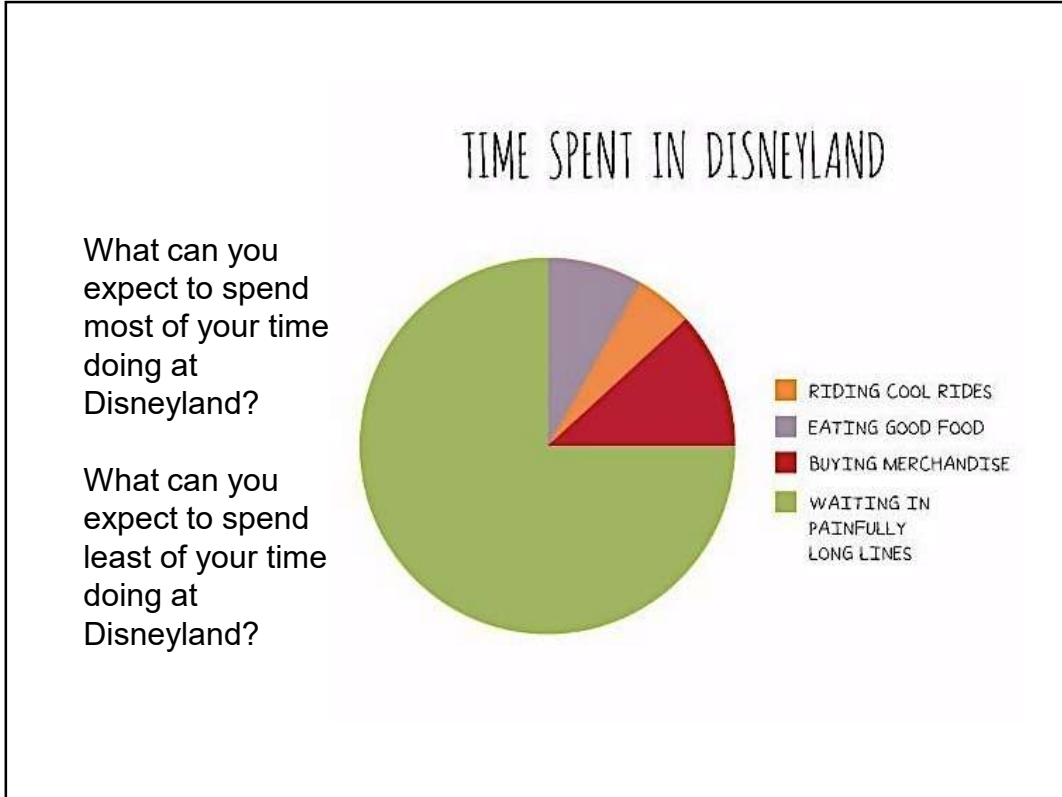
What is the most common shoe length? _____

What is the least common shoe length? _____

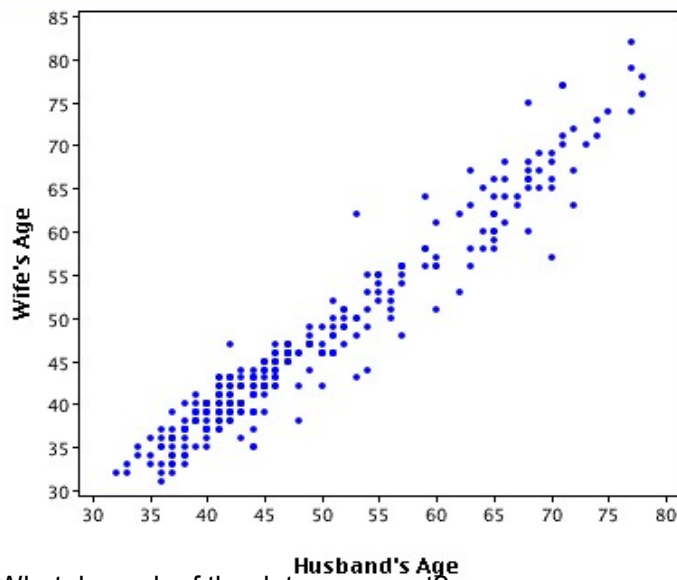
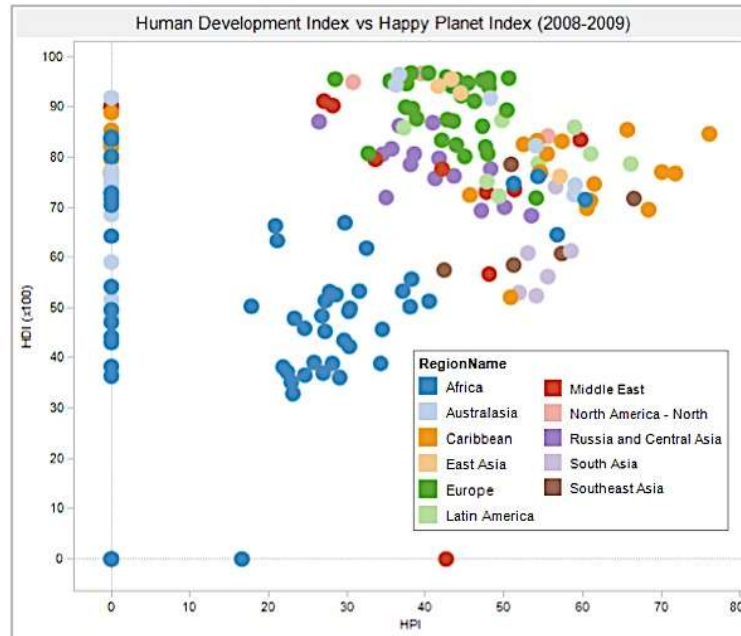
How many people have shoes that are 26 cm long? _____

Pie charts are also used to compare values (usually as a percentage but not always).





Scatterplots are used to compare trends among _____.



What do each of the dots represent? _____
 Approximately how old are husbands of 40 yo wives? _____
 Approximately how old are wives of 70 yo husbands? _____
 MOST ages lie within which range? _____

For each scenario, choose which type of graph would be best to use (line, bar, pie, or scatter plot).

1. To show how eating vegetables over a 10 year period can lower cholesterol. _____
2. To compare the leg lengths and antennae lengths of crickets. _____
3. To analyze the relationship between hours studying for a test and test scores among students. _____
4. To show the percentages of students in class that are male vs. female _____.
5. To compare the salaries of 4 different professions: teacher, veterinarian, software engineer, banker _____