

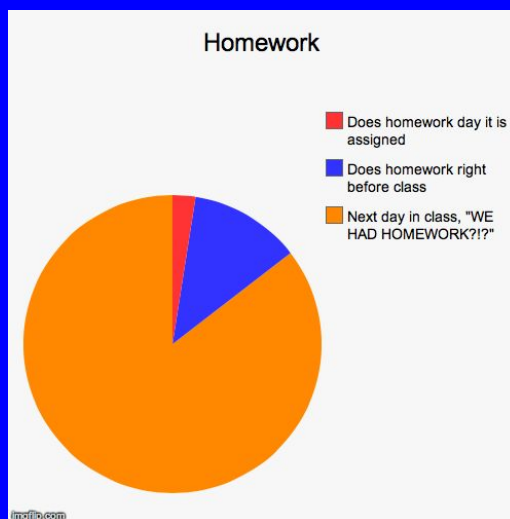
January 16, 2020

1. Notes

2. Book

3. Protractor

4. CALC



Topic: Pie Charts & Bar Graphs

Name: _____

What am I learning today?

Warm Up

Read the text on page 35-36 of your book.

"So, does education pay?"

Main Ideas

Percentages vs.
Raw Numbers

Answer the following using the table located on page 37.

In 2007, how many people (in thousands) between the ages of 25 and 34 had a Bachelor's degree?

9,076,000

What percentage of all adults between ages of 25 and 34 was that?

22.8%

Which statement sounds more appealing and useful? Why?

- In 2007, 5,126,000 young adults did not finish high school
- In 2007, only 12.9% of young adults did not finish high school

Sum: 39,870

TOTAL: 39,868

Add up the number of persons from the chart we just used. Does this equal the total actual? Why not?

Roundoff Error – The difference between the **calculated approximation** of a number and its **exact mathematical value** due to **rounding**

The amount should be **small** and **very close** to the exact value

Pie Charts & Bar Graphs

A pie chart and bar graphs are the only two data displays that show

categorical data.

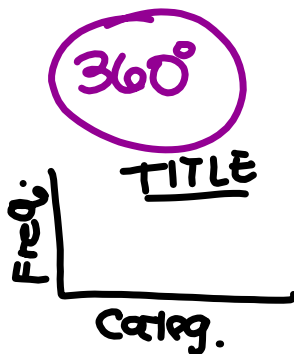
Pie Chart – A chart that uses "pie slices" to show relative **size** (or a **proportion**) of the data

- Pie charts can ONLY be used if the percentage adds up to **100** %

Roundoff Error can result in a pie chart that does not equal 100%!

Bar Graph – A graph made up of bars that **DON'T** touch to show categories and frequencies to show the distribution of data

- Does not have to represent a **frequency** (can be a %)
- Categories are represented on the **x-axis**.
- Frequency is represented with the **y-axis**.

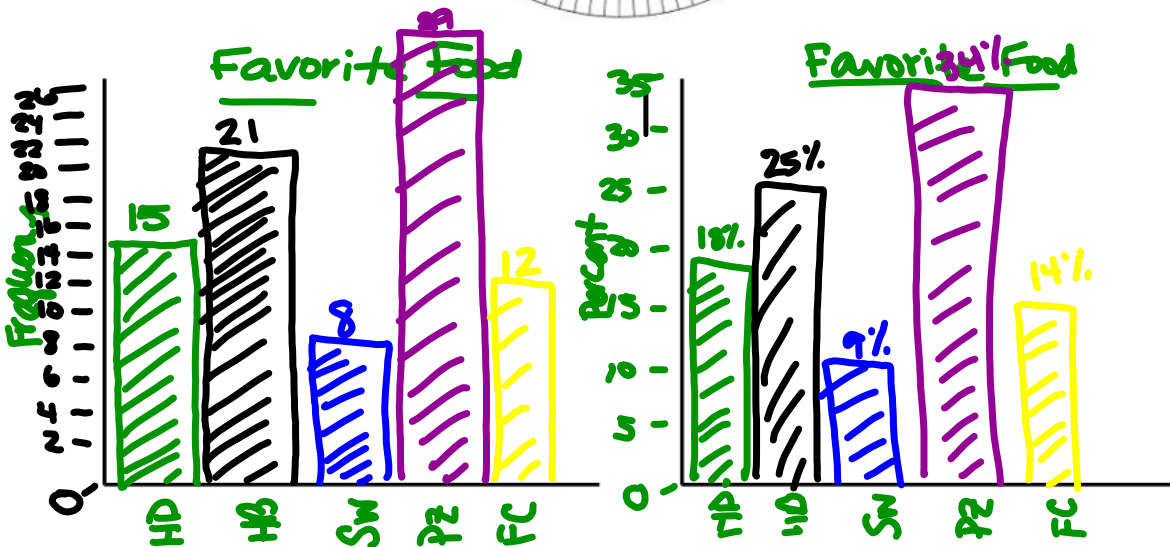
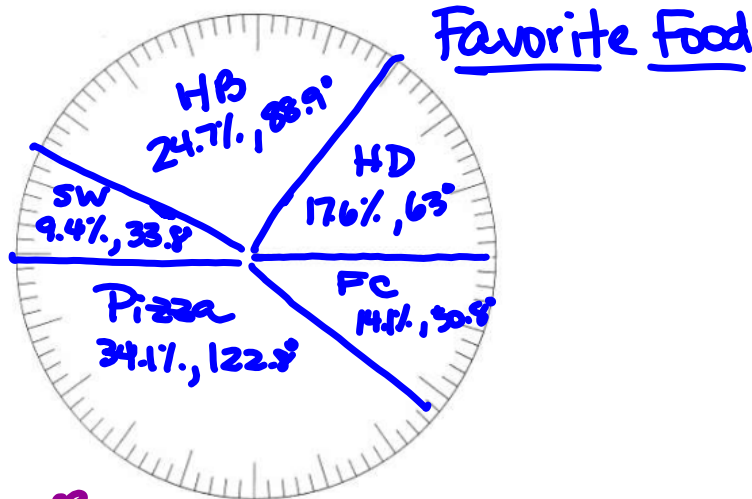


Topic: Pie Charts & Bar Graphs

Examples
How to Construct a Pie Chart and Bar Graph

Rock Restaurant surveyed a sample of customers on their favorite food. The results are shown below. Make a bar graph and a pie chart to display the data that was collected. Be sure to label your charts.

Food	# of People	Percent	Degrees
Hotdog	15	$\frac{15}{85} = 17.6\%$	63.4°
Hamburger	21	24.7%	88.9°
Sandwich	8	9.4%	33.4°
Pizza	29	34.1%	122.8°
Fried Chicken	12	14.1%	50.8°
TOTAL:	85	99.9%	359.6°



Practice

PG. 40 #2.1, 2.3-2.5

Married \rightarrow 57%.
204°

$$\begin{array}{r} 204 \\ - 180 \\ \hline 24 \end{array}$$

