HOUSEHOLD INCOME IN THE U.S.

1. Imagine that each household in your quintile made exactly the same amount of money.
   a. How much would each household make? Show how you can use the blocks to solve this problem.
   b. Do you know the mathematical name for the quantity you found?
   c. Fill in Table 1 below by talking to the other quintiles.
   d. You can find the actual values from 2012 (most recent available) in table "H-3 All Races" at www.census.gov/hhes/www/income/data/historical/inequality/index.html

	Lowest quintile	Second quintile	Third quintile	Fourth quintile	Highest quintile	*Top 5%*
If each household earned the same						$318,000

Table 1. Approximation of U.S. Income

Table 2 shows the household incomes for all 20 bags/households.

Quintile	"Household" 1	"Household" 2	"Household" 3	"Household" 4
First	$4,000	$9,000	$15,000	$18,000
Second	$23,000	$28,000	$31,000	$37,000
Third	$43,000	$47,000	$54,000	$61,000
Fourth	$68,000	$75,000	$83,000	$102,000
Fifth	$106,000	$145,000	$159,000	$318,000

Table 2. Our Household Incomes

Who Is "Typical"?

2. ***Do not do any calculations*** or anything like that. This is just to get your "gut reaction." Looking at Table 2, what would you say the income is for a "typical" U.S. household? Why?

3. Find the **mean** U.S. household income.
   a. Recall how we defined this earlier. What would the **mean** tell us in this context?
   b. Who here is closest to this amount? Which quintile are they in?

4. Find the **median** U.S. household income: Imagine that all 20 bags were lined up from poorest to richest. Pick out the middle bag (because we have an even number of bags, take the average of the two middle bags).
   a. How much would this middle household make (use Table 2)?
   b. Who in our group is closest to this middle income? Which quintile are they in?

5. Mean versus median.
   a. Do you think the mean or median is a better measure of typical for these data? Why?
   b. Why is the mean so much higher than the median? Would it be possible for the mean to be lower than the median?

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Analyzing and Representing the Data

6. Work in your group to brainstorm ways that we could analyze these data. What kinds of questions could we ask? What mathematics would we do to answer them? Are there are additional data that you would like to see?

7. Starting with the poorest household in class and working our way up…
   a. …how many households will it take to equal the income of the richest household?
   b. So fill in the blank: in the U.S. the richest 5% earns as much as the bottom ___%

8. Make a **pie/circle graph** and **bar graph** showing each quintile's share of the total household income in the U.S. See if you can also figure out how to represent the Top 5%'s share. What is clearly communicated in each representation? What is not?

ADDITIONAL RESOURCES

Income Inequality and Class in the U.S.
- Slate.com has an excellent series called *The United States of Inequality* by Timothy Noah, which includes a number of excellent graphical representations of data. http://www.slate.com/articles/news_and_politics/the_great_divergence/features/2010/the _united_states_of_inequality/introducing_the_great_divergence.html
- A recent report came out looking at income mobility by geographic region:
  - Website of the authors: http://www.equality-of-opportunity.org/
  - The NYTimes also has a piece on this with some nice interactive displays: http://www.nytimes.com/2013/07/22/business/in-climbing-income-ladder-location-matters.html
- The NYTimes had a special section called *Class Matters* several years ago: http://www.nytimes.com/pages/national/class/index.html
- U.S. Census data on income inequality: http://www.census.gov/hhes/www/income/data/inequality/index.html

General Global Data
- World Bank data on income and poverty: http://data.worldbank.org/topic/poverty
- United Nations data on income and poverty: http://unstats.un.org/unsd/demographic/sconcerns/income/
- Information on the Gini Coefficient, a widely used measure of income inequality: http://en.wikipedia.org/wiki/Gini_coefficient

Wealth Inequality in U.S.
There was a report about people's perceptions of wealth inequality in the U.S. versus their ideal wealth distribution.
- PBS has a nice story on it: http://www.pbs.org/newshour/bb/business/july-dec11/makingsense_08-16.html?32
- The actual research report is pretty short and easy to read: http://www.people.hbs.edu/mnorton/norton%20ariely%20in%20press.pdf