



In a study to determine if posting calorie counts affects their customer menu choices, Starbucks retained copies of the receipts for one week in various stores around the United States. Calories were posted by each menu item in 50 of their stores in New York City, California, and Washington State, but no changes were made to 50 Starbucks in Dallas, Florida, and Wyoming. Starbucks reported that the average calorie consumption reduced by 6% per transaction.

Choose from the following to complete the statements below (not all of them will be used):

- a. calorie consumption per transaction*
- b. Starbucks customers at 50 selected stores in New York, California, and Washington State*
- c. menus that post calories by each item and menus that do not*
- d. Starbucks' menus*
- e. education level of the customers*
- f. Starbucks customers at 100 selected stores in New York, California, Washington State, Dallas, Florida, and Wyoming*
- g. Starbucks customers at 50 selected stores in Dallas, Florida, and Wyoming*
- h. all Starbucks customers*
- i. all American researchers*
- j. experimental*
- k. observational*

Write the letter of the phrase that best completes the statements below:

15. The population is \_\_\_\_\_.

16. The sample is \_\_\_\_\_.

17. The explanatory variable is \_\_\_\_\_.

18. The response variable is \_\_\_\_\_.

19. The study is \_\_\_\_\_.

20. A lurking variable may be \_\_\_\_\_.

21. The treatment group is \_\_\_\_\_.

22. The control group is \_\_\_\_\_.

23. Honda manufacturers test drove 12 pre-production prototypes of the 2017 Fit vehicles to determine their fuel efficiency.

*Honda Fit  
City Driving (mpg)*

30    30    32    34    34    35  
35    40    42    42    42    43

Construct a frequency distribution for the fuel efficiency data using 5 classes.  
Some have been filled in for you to give you a head start.

<b>2017 Honda Fit fuel economy during city driving</b>			
<b>MPG Class</b>	<b>MPG Class Boundaries</b>	<b>Frequency</b>	<b>Percent (to 1 decimal place)</b>
30 - 32			
	41.5 – 44.5		

24. A veterinarian counted the number of dogs of different breeds that were brought into her clinic on a particular day. Here is what she counted:

Beagle	Golden Retriever	Labrador Retriever	German Shepherd	Bulldog
5	10	14	9	6

Make a pie graph to represent the data above. Show all of your calculations. Title your graph, neatly shade in each category using different colors, and label each sector or include a key.

	Frequency	Relative Frequency	Angle
Beagle			
Golden Retriever			
Labrador Retriever			
German Shepherd			
Bulldog			

