

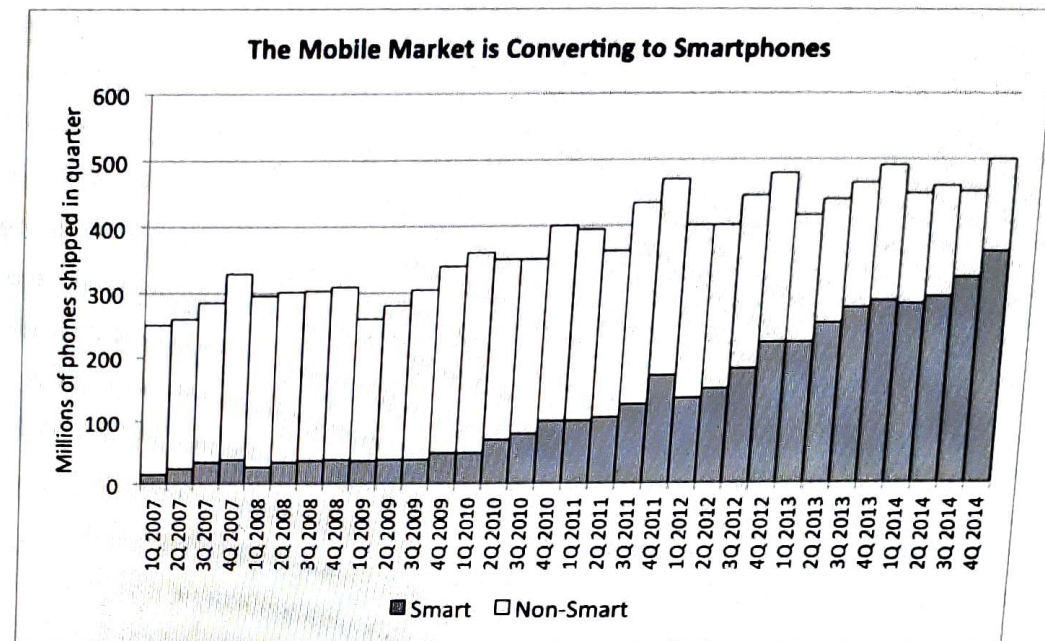
- Question 1

1 point

How Did I Do?

The stacked bar chart below (Figure 4) shows the sales of mobile phones, both smartphones and non-smartphones, by quarter (a fourth of a year, often used by businesses). Use this chart to answer Questions 1–5.

Figure 4: Stacked Bar Chart for Mobile Phone Sales by Quarter†



How many full years are covered by this stacked bar chart?

†Data adapted from <https://theoverspill.files.wordpress.com/2015/02/screenshot-2015-02-08-21-29-03.png>.

- Question 2

Is it easier to read the sales trends for smartphones or non-smartphones in this chart? Why?

- Question 2

1 point

Is it easier to read the sales trends for smartphones or non-smartphones in this chart? Why?

The image shows a blank text editor window. The toolbar at the top includes icons for undo, redo, copy, paste, delete, find, and various text formatting options like bold, italic, underline, strikethrough, and text color. Below the toolbar are dropdown menus for Styles, Font, and Size. The main text area is empty. In the bottom right corner, it says "Words: 0".

- Question 3

1 point

What overall story is this chart telling us about how sales of smartphones vs. non-smartphones compare over time?

The image shows a blank text editor window, identical to the one in Question 2. It has a toolbar with various icons, dropdown menus for Styles, Font, and Size, and a large empty text area. The bottom right corner indicates "Words: 0".

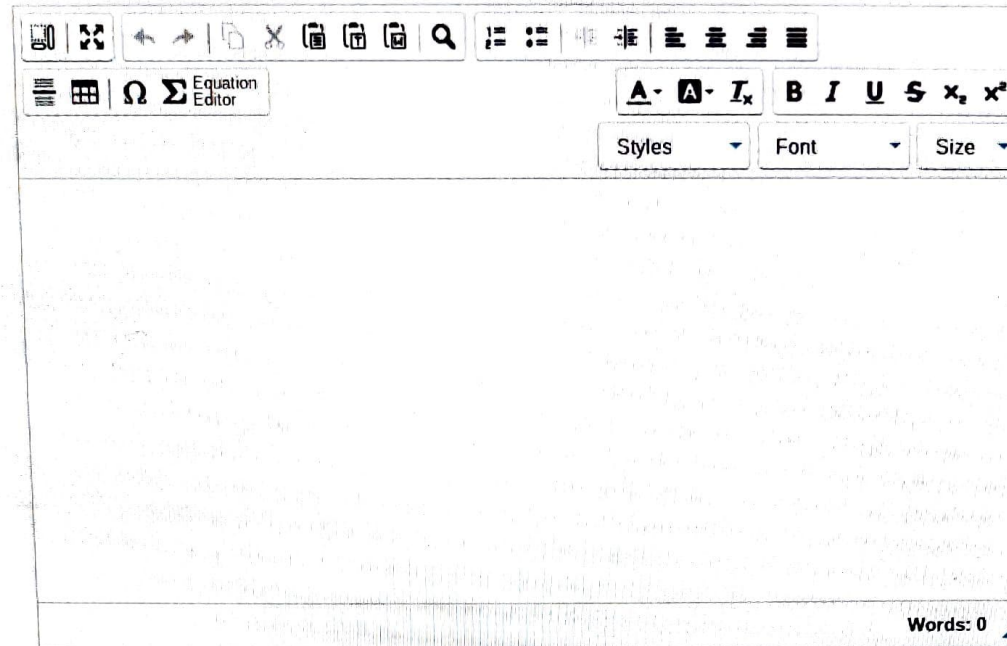
Submit Assignment

Quit & Save

- Question 4

1 point

Would it be easy for you to convert this to a non-stacked bar chart, using only this chart? Why or why not?



- Question 5

1 point

How Did I Do?

What would happen if a table were made using this chart, to show the trend in smartphone sales as a percentage of total mobile phone sales?

- ☐ (i) The percentage would tend to decrease over time.
- ☐ (ii) The percentage would tend to remain the same over time.
- ☐ (iii) The percentage would tend to increase over time.
- ☐ (iv) There is not enough information. We need the actual sales numbers for each quarter.

- Question 6

1 point

How Did I Do?

The following information was provided by the Coalition for the Homeless.[‡] Refer to these data for Questions 6–8. (You are encouraged to actually go to the source of the data shown in the footnote and check it out. It is an excellent example of how data can be presented in bar charts and pie charts in an interactive, clear and informative manner.)

New York City's Homeless Shelter Population, Average nightly numbers, December 2015:

- Total number of homeless people in municipal shelters: 60,096.

Submit Assignment

Quit & Save

- Question 6

1 point

How Did I Do?

The following information was provided by the Coalition for the Homeless.[†] Refer to these data for Questions 6–8. (You are encouraged to actually go to the source of the data shown in the footnote and check it out. It is an excellent example of how data can be presented in bar charts and pie charts in an interactive, clear and informative manner.)

New York City's Homeless Shelter Population, Average nightly numbers, December 2015:

- Total number of homeless people in municipal shelters: 60,096.
- Kids in families: 23,885.
- Adults in families: 22,143.
- Single adults: 14,068.

What percent of the people in homeless shelters each night in New York City in December 2015 were adults in families?

Round to the nearest whole percent.

Number %

[†]<http://www.coalitionforthehomeless.org/the-catastrophe-of-homelessness/facts-about-homelessness/>, accessed April 29, 2017.

- Question 7

1 point

What kind of chart would best compare the proportion of homeless kids in families, adults in families, and single adults in New York City's homeless shelters in December 2015? Explain your reasoning.

Equation Editor

Styles Font Size

1 point

How Did I Do?

Using Google Sheets (or another spreadsheet application), create the chart you chose in the last problem to visually compare the three populations. Upload an image of your chart.

Use only letters and numbers in your file name. Do not use spaces.

Choose File No file chosen

Upload

Allowed Extensions: gif html jpg pdf png

- Question 9

2 points

The table below summarizes additional information from the Coalition for the Homeless.⁴

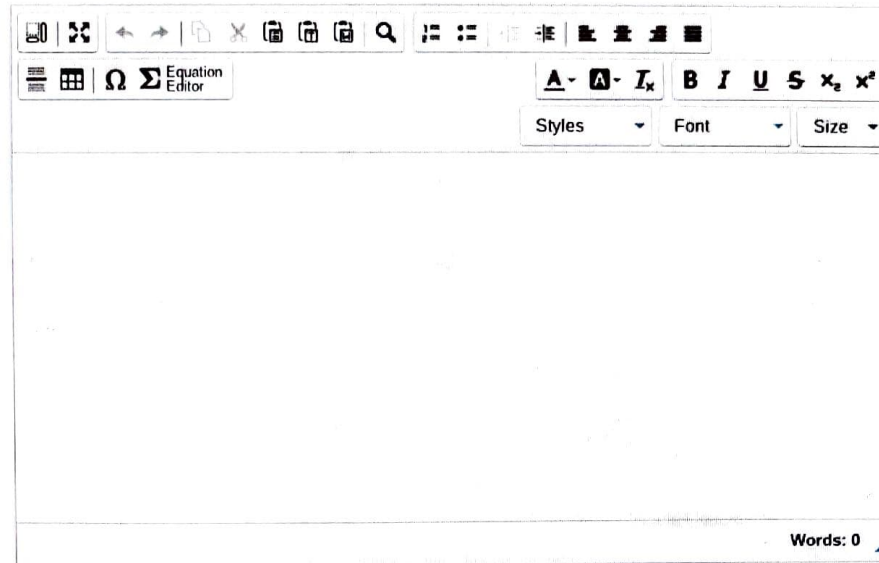
Month, Year	Average Number of Homeless Kids Each Night in Shelters in New York City	Average Number of Homeless Adults Each Night in Shelters in New York City
December, 2012	20,826	28,797
December, 2013	22,548	30,625
December, 2014	25,849	35,090
December, 2015	23,885	36,211

- a. Create two bar charts in Google Sheets (or another spreadsheet application) to compare the number of kids and the number of adults who slept in New York City homeless shelters each night during the last month of the year between 2012 and 2015. One chart should have two bars for each year (years along the horizontal axis). The other chart should have the four bars for kids grouped together on the left, then the four bars for adults grouped together on the right. Are the two bar charts telling the same story? What stories are they telling? Explain your reasoning.

Submit Assignment

Quit & Save

b. What are the advantages and disadvantages to each format? Explain your reasoning.



[†]<http://www.coalitionforthehomeless.org/the-catastrophe-of-homelessness/facts-about-homelessness/>, accessed April 29, 2017.

- Question 10

1 point

How Did I Do?

Smartphones that use iOS are only sold by the Apple company, and are called iPhones. Android phones, in contrast, are sold by a variety of companies, and therefore there is market competition that drives down the price of Android phones. On average, the price of an Android smartphone is about a third of the price of an iPhone. In Question 9 in class, you created a bar chart for Android and iOS Sales. If we were to make a new bar chart comparing global *revenue* (converted to U.S. dollars) rather than percentage *share* of the market (in units sold), how would the bar for the iPhone in the new graph compare to the one in the first graph?

- ☐ (i) It would be higher for revenue in dollars than for sales in units.
- ☐ (ii) It would be lower for revenue in dollars, than for sales in units.
- ☐ (iii) It wouldn't change, since the same phones are sold either way.
- ☐ (iv) There is not enough information to determine the answer.

a. What story does this chart tell about individual income tax revenue since 1950?

Equation Editor

Styles Font Size

Words: 0

b. What story does this chart tell about corporate income tax revenue since 1950?

Equation Editor

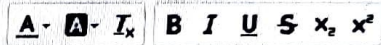
Styles Font Size

Words: 0

Words: 0

c. What story does this chart tell about payroll tax revenue since 1950?






Words: 0