**Assignment 1 – Ch 1 Data and Statistics**

1. The Wall Street Journal (WSJ) subscriber survey (October 13, 2003) asked 46 questions about subscriber characteristics and interests. State whether each of the following questions provided qualitative or quantitative data and indicate the measurement scale appropriate for each.

a. What is your age?

b. Are you male or female?

c. When did you first start reading the WSJ? High school, college, early career, midcareer, late career, or retirement?

d. How long have you been in your present job or position?

e. What type of vehicle are you considering for your next purchase? Nine response categories include sedan, sports car, SUV, minivan, and so on.

1. CSM Worldwide forecasts global production for all automobile manufacturers. The following CSM data show the forecast of global auto production for General Motors, Ford, DaimlerChrysler, and Toyota for the years 2004 to 2007 (USA Today, December 21, 2005).

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Manufacturer** | **2004** | **2005** | **2006** | **2007** |
| **General Motors** | 8.9 | 9.0 | 8.9 | 8.8 |
| **Ford** | 7.8 | 7.7 | 7.8 | 7.9 |
| **DaimlerChrysler** | 4.1 | 4.2 | 4.3 | 4.6 |
| **Toyota** | 7.8 | 8.3 | 9.1 | 9.6 |

Data are in millions of vehicles.

1. Construct a time series graph for the years 2004 to 2007 showing the number of vehicles manufactured by each automotive company. Show the time series for all four manufacturers on the same graph

b. General Motors has been the undisputed production leader of automobiles since 1931. What does the time series graph show about who is the world’s biggest car company? Discuss.

c. Construct a bar graph showing vehicles produced by automobile manufacturer using the 2007 data. Is this graph based on cross-sectional or time series data?