Global Population Patterns and Demographic Transitions

Materials Needed

* *World Population Data Sheet*
* Graphing paper

Instructions  
Refer to the current *World Population Data Sheet* by the Population Reference Bureau to answer the following questions.   
  
How Do Demographic Characteristics Vary Among World Regions?

1. Calculate the percentage (to the nearest whole number) of the world's population expected to be living in less-developed countries in 2025 and in 2050.  
   2025: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2050: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Rank the following regions according to the demographic characteristics in the chart below. Rates can be found in the *World Population Data Sheet:* Africa, Asia, North America, Latin America, Europe.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Rank | CBR (Crude Birth Rate) | | CDR (Crude Death Rate) | | RNI (Rate of Natural Increase) | |
|  | Region | Rate | Region | Rate | Region | Rate |
| Highest |  |  |  |  |  |  |
| 2nd Highest |  |  |  |  |  |  |
| Middle |  |  |  |  |  |  |
| 2nd Lowest |  |  |  |  |  |  |
| Lowest |  |  |  |  |  |  |

1. Find the country with the highest crude birth rate (CBR) and fill in the name of the country and the rate in the chart below. If there is more than one country with the same rate, select any one of the countries. Do the same for the highest crude death rate (CDR) and the lowest crude birth and death rates.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Highest | | Lowest | | Hi-Low |
|  | Country | Rate | Country | Rate |
| CBR |  |  |  |  |  |
| CDR |  |  |  |  |  |

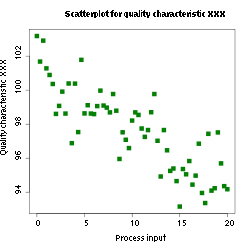
1. Subtract the lowest rate from the highest rate for both crude births and deaths and enter in the chart.
2. Is the difference between more developed countries and less developed countries greater for the crude birth rate or the crude death rate? Why do you think this is?

Is There Correlation Between Demographic Indicators and Economic Well-Being?  
Refer again to the current *World Population Data Sheet* to complete the chart below:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | CBR (Crude Birth Rate) | CDR (Crude Death Rate) | RNI (Rate of Natural Increase) | GNI PPP/Capita\* |
| Burkina Faso |  |  |  |  |
| Canada |  |  |  |  |
| China |  |  |  |  |
| Cyprus |  |  |  |  |
| France |  |  |  |  |
| Italy |  |  |  |  |
| Malaysia |  |  |  |  |
| New Zealand |  |  |  |  |
| United Arab Emirates |  |  |  |  |
| Zambia |  |  |  |  |

\*GNI PPP refers to gross national income converted to "international" dollars using a purchasing power parity conversion factor. International dollars indicate the amount of goods and services one could buy in the United States with a given amount of money.   
  
6. Use the data collected in the chart above to construct three simple scattergrams relating crude birth rate and GNI PPP/capita, crude death rate and GNI PPP/capita, and rate of natural increase and GNI PPP/capita.

Note: Scattergrams can be constructed on graph paper and are line graphs that are not connected by a line. Like the example below

[](http://en.wikipedia.org/wiki/File:Scatter_diagram_for_quality_characteristic_XXX.svg)

7. In general, what is the relationship between each indicator and GNI PPP/capita? Phrase your response in the form of three generalizations (for example, "the higher the CBR, the... the GNI PPP/capita").

8. Identify countries that are outliers in each graph. How do you account for each country's deviation from the general trend?