**Locating a car factory in Brazil**

**Activity sheet**

***Personnel Manager***

In this part, you are looking for:

* Cheap labour
* An educated workforce

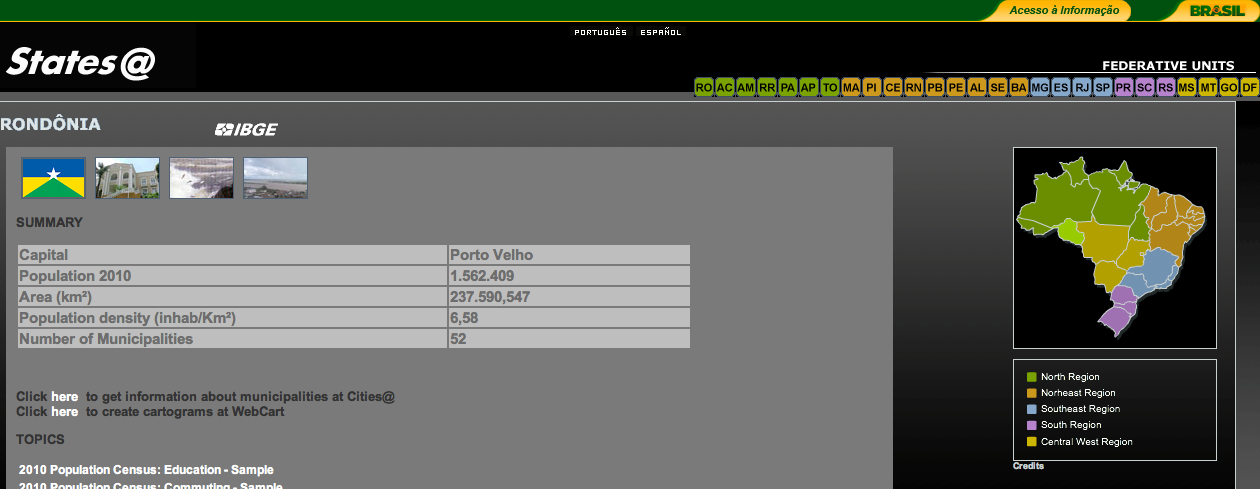
**PART 1 Data Gathering:**

1. Complete the Excel table for the **population density.**   
   You need to find out the **population** and **area (km2)** of each state and region of Brazil.

Use the following website to help you to complete the table:

1. Click here to select the **state**

<http://www.ibge.gov.br/estadosat/perfil.php?sigla=ro>



2. Find the **population** number here

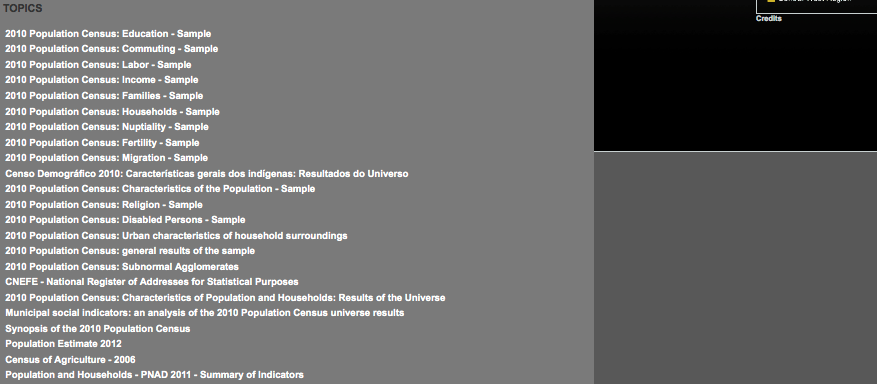
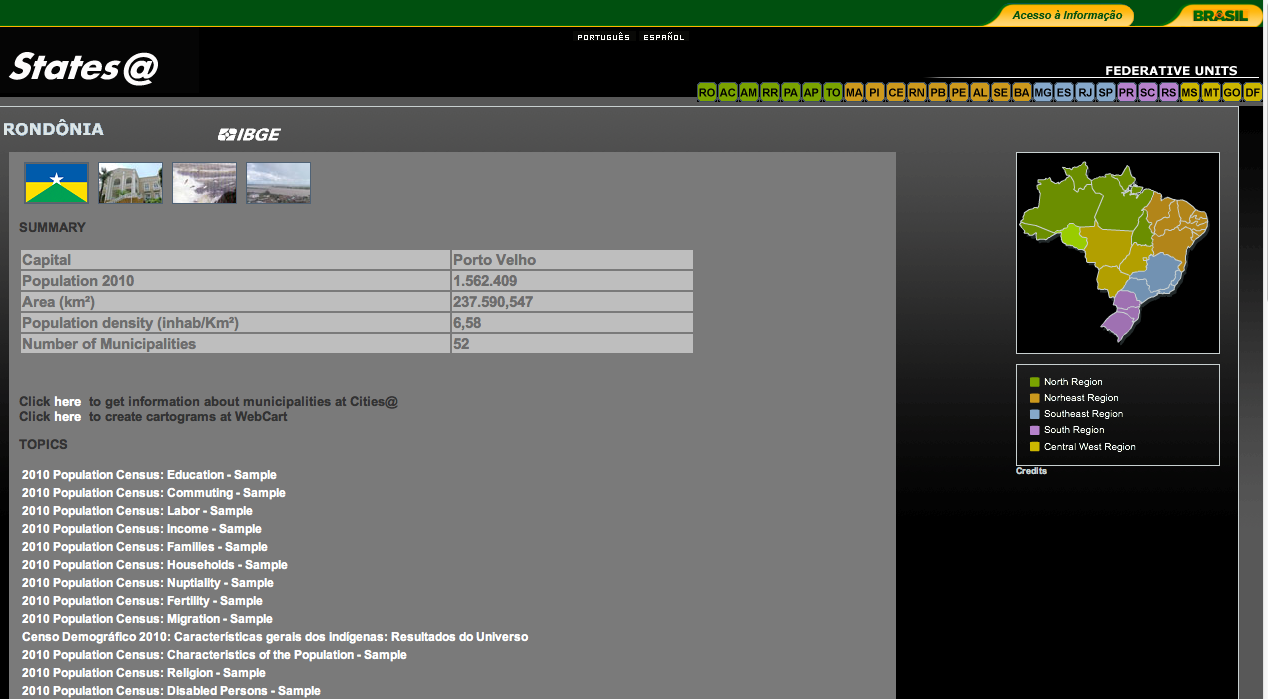
3. Find the **area (Km2)** here

1. Complete the Excel table for the **literacy rate** of each state and region of Brazil.

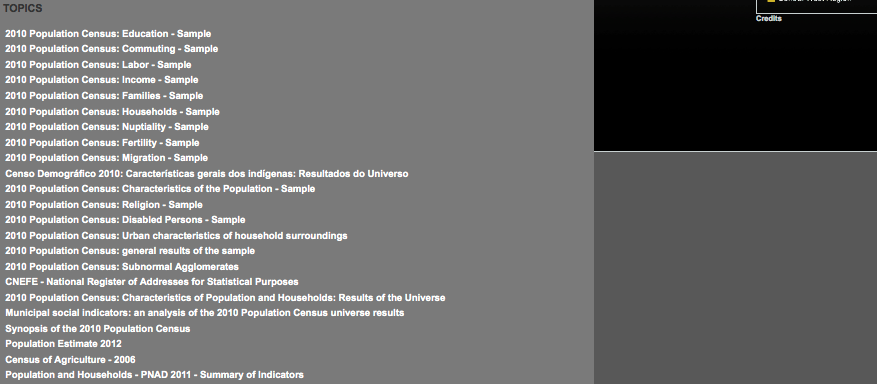
Use the following website to help you to complete the table:

<http://www.ibge.gov.br/estadosat/perfil.php?sigla=ro>

1. Click here to select the **state**

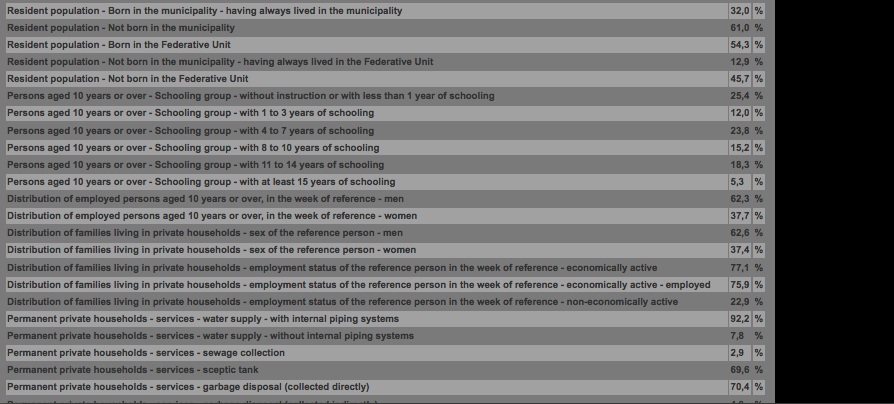


2. Scroll down the page.

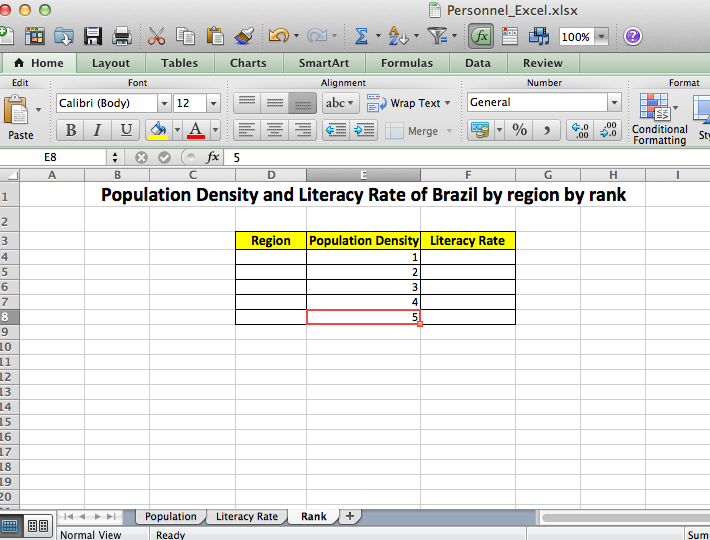
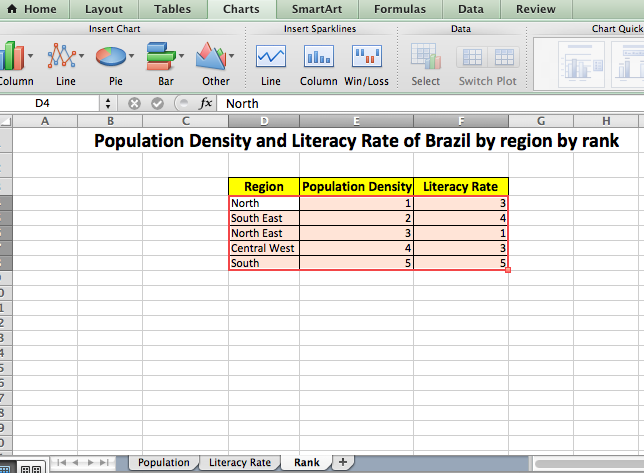
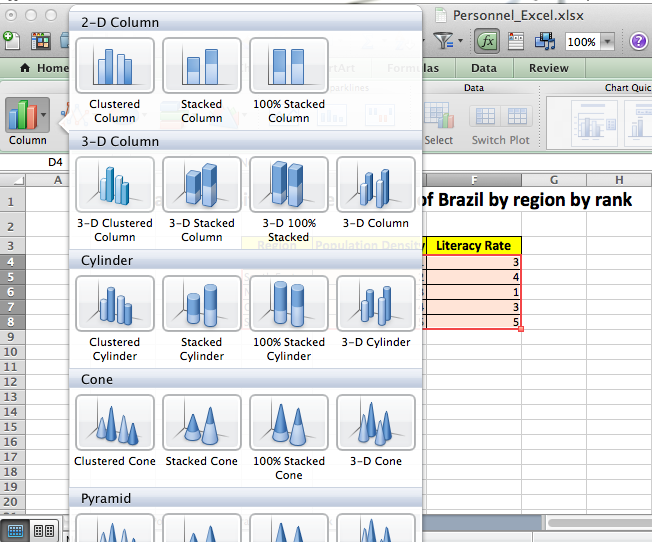


3. Click on **‘Population and Households - PNAD 2011 - Summary of Indicators”**

**PART 2 Create 3-D bar chart:**

Use excel to create **a 3-D bar chart** to show you findings:

4. Look at **“Persons aged 10 years or over - Schooling group - with 11 to 14 years of schooling”**

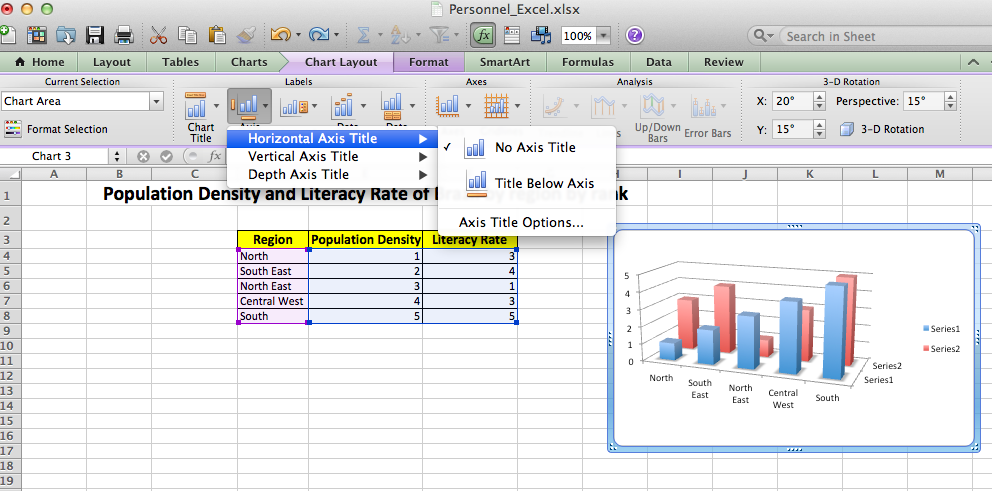
  
  


2. Go to Literacy Rate page to find out the ranking of **literacy rate of different regions**

1. Go to Population page to find out the ranking of **population density of different regions**

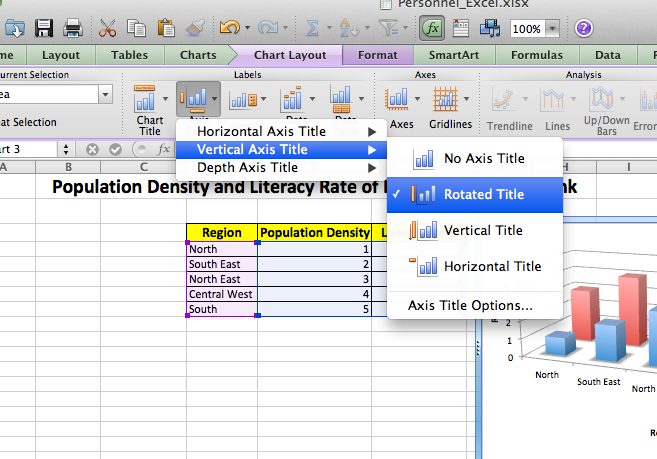
3. Select **ALL** data

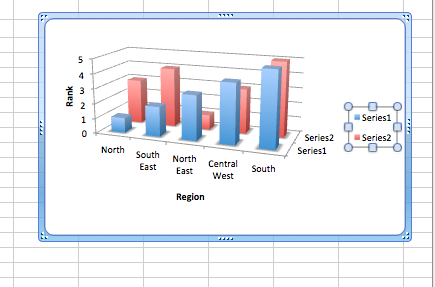
4. Click “Charts “ and select “3-D Column”



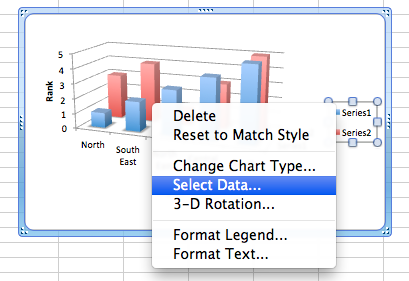
5. Go to **“Chart Layout”**, Click **“Axis Titles”** and choose **“Horizontal Axis Title”** then select **“Title Below Axis”**

6. Click **“Vertical Axis Title”** then select **“Rotated Title”**

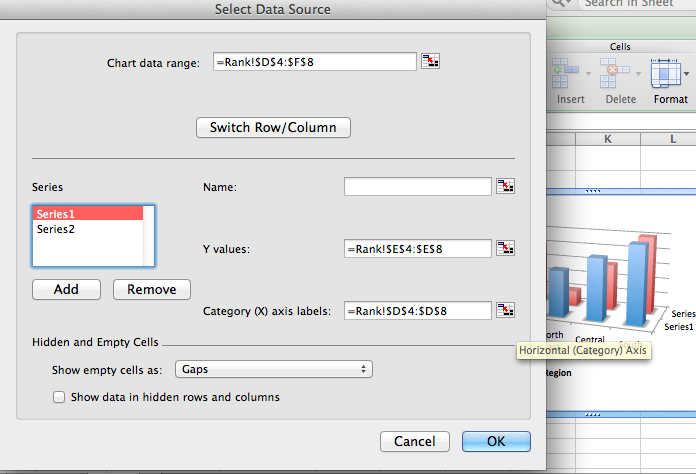




7. Change the titles to **Rank** and **Region**

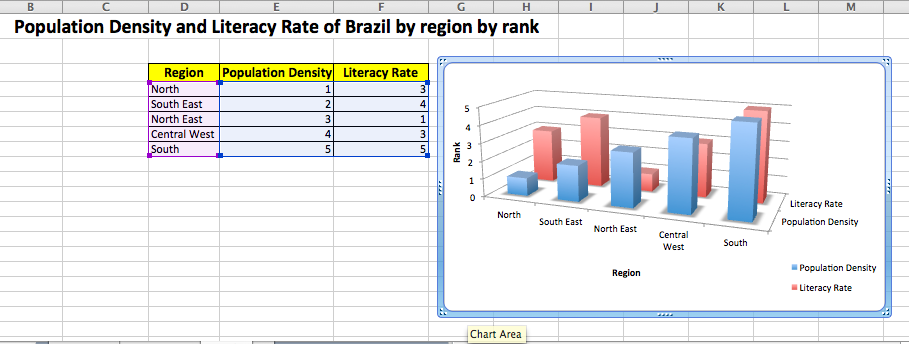
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8. **Right click** series box and choose **“Select Data”**

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9. Select **“Series 1”** and Put **“Population Density”** in the name box.   
Then, select **“Series 2”** and Put **“Literacy Rate”** in the name box.

**Final Product**

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**PART 3 Data Analysis**As Personnel Manager you are looking for a region with lots of **cheap and educated labour.**

1. What is population density?  
   **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
2. *“****The higher the population density the cheaper the labour.****”*Why do you think this is?

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1. Which region has the highest population density?

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1. What is literacy rate?

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

1. Which region has the highest literacy rate?

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1. Look at your 3-D chart, which region has the most balanced data?  
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2. As a personnel manager, I would choose the following region to build the factory… (Briefly explain your answer)

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