

Chapter 4 Task for Web

Task

Apply Data Management

Some people claim there is a relationship between the number of hours spent on homework by students and the number of hours spent on other activities. You will analyse data to verify whether or not this claim is reasonable.

Go to www19.statcan.ca/r000_e.htm to access the Census at School Web site.

- Select **Data and Results**. Scroll down and select **random data selector**.
- Click the link given.
- Scroll down and select **Choose data**. Select **Canada**.
- From the **Select a Phase** menu, select **Phase 3 (05/06)** .
- Download a sample of 200 records from **All Provinces**. The sample will be downloaded as a Microsoft® *Excel* file.

You will be analysing these relationships:

- Time spent playing on computer compared to time spent on homework.
 - Time spent reading compared to time spent on homework.
 - Time spent watching television compared to time spent on homework.
 - Time spent playing music compared to time spent on homework.
- Copy the appropriate columns from Microsoft® *Excel* into a *Fathom*TM collection box. Drag a **table** onto the desktop.
 - Click on the **Homework** column heading. From the **Data** menu, select **Sort Ascending**.
 - Repeat for the other four column headings.

1. Look at the **Homework** column.

a) Determine the percentile that represents 5 h.

b) Identify the number of hours represented by the 75th percentile.

2. Repeat question 1 for the other four variables.

a) playing on computer

b) reading

c) watching television

d) playing music

3. Compare your answers to question 1 and 2.

4. Construct a scatter plot for each relationship. Then, use the graph to determine the equation line of best fit, and analyse r^2 .

5. Refer to your answers to questions 1 to 4. Is there a relationship between the number of hours spent on homework and the number of hours spent on other activities? Explain.