

P2W Skills for Success

Activity Set 22: Graphs Part 1



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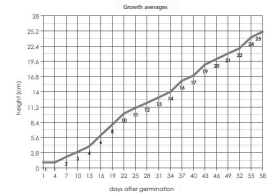
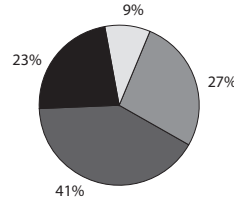
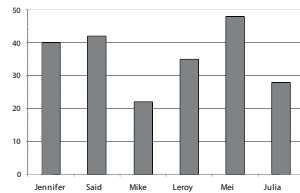
p2w
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Employment Programs

22.1: Getting Started

What?

Graphs can present numerical information about work in many formats.



Why?

To better understand employment-related numerical information

Who?

- ✓ Sales managers read bar graphs to compare sales in different departments.
- ✓ Real estate agents read circle graphs showing the proportion of house sales that are first-time buyers.
- ✓ Health and safety representatives read line graphs showing injury rates over time to identify patterns and trends.

What's involved?

- Recognizing types of graphs
- Identifying purpose of data display
- Interpreting organizational features (e.g., titles, labels and legends)
- Locating data
- Identifying patterns and trends

How about you?



List some situations when you have interpreted information in graphs.

1. _____

2. _____

3. _____

4. _____

5. _____

How comfortable are you using these skills?

I need a lot of practice

I'm very comfortable

1

2

3

4

5

6

7

8

9

10

22.2: Bar Graphs

What do bar graphs show?

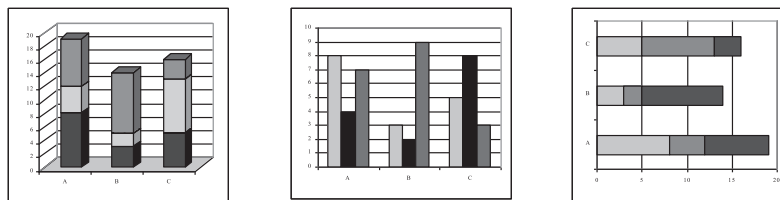
Bar graphs use bars to represent amounts. Bar graphs typically display several bars so workers can compare numbers across different categories. The length of each bar represents a quantity; when read together, the bars show how quantities relate to each other.

How are bar graphs used?

In the sales and service sector, bar graphs may be used to show the dollar value of sales in different months. Workers read these graphs to identify how much was sold in each month, and to look for patterns. In manufacturing settings, these graphs may be used to show how much was produced. Workers read these graphs to compare production rates.

What do bar graphs look like?

Bar graphs can take different formats. Bars can extend vertically (up and down) or horizontally (sideways). They may display data points in single bars, stack data within the same bar or group bars together.

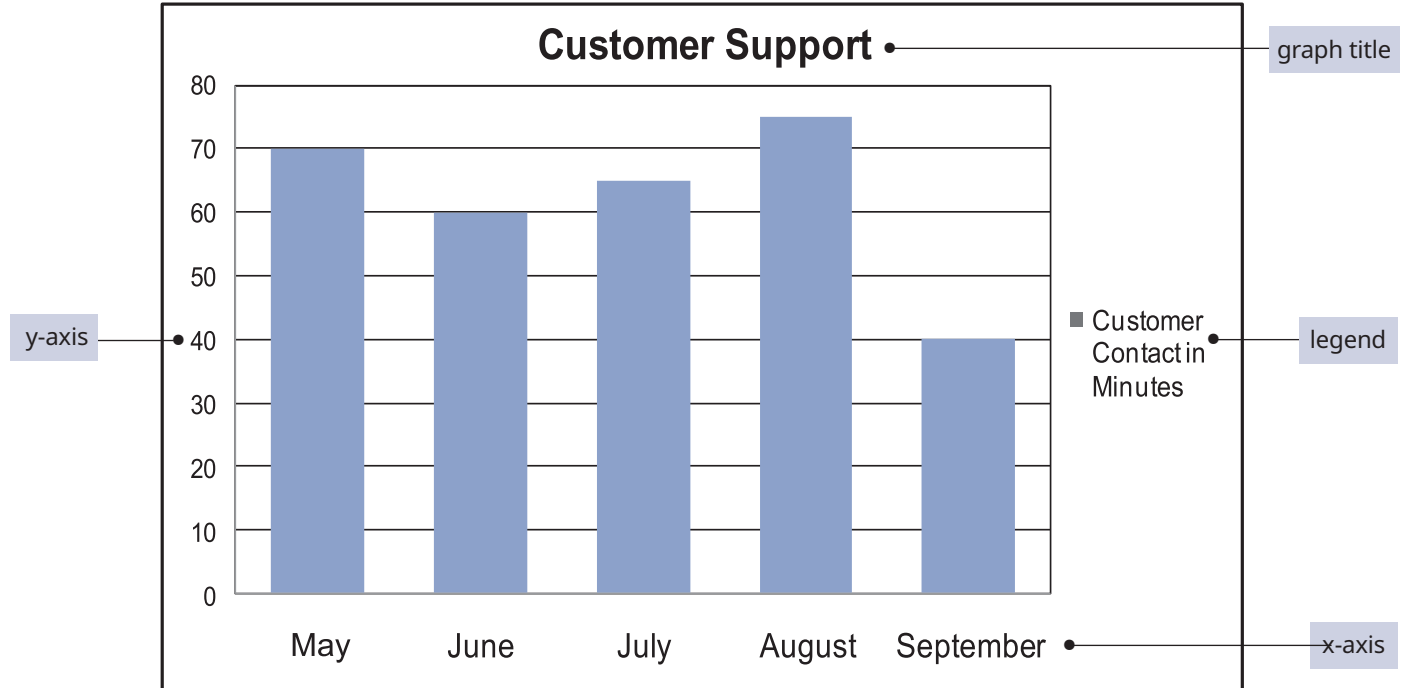


How do you read bar graphs?

To read a bar graph, you must first understand what is being represented. Here are some steps that can be followed to help interpret bar graphs:

1. Scan the graph to locate the title.
2. Locate the x-axis and y-axis. The x-axis is horizontal (sideways) and usually displays categories. The y-axis is vertical (up and down) and usually displays quantities. The displays are reversed when bars extend horizontally.
3. Locate the legend to identify categories or subcategories for the graph.
4. Identify any additional information, such as data labels, found on the graph.

22.2: Bar Graphs



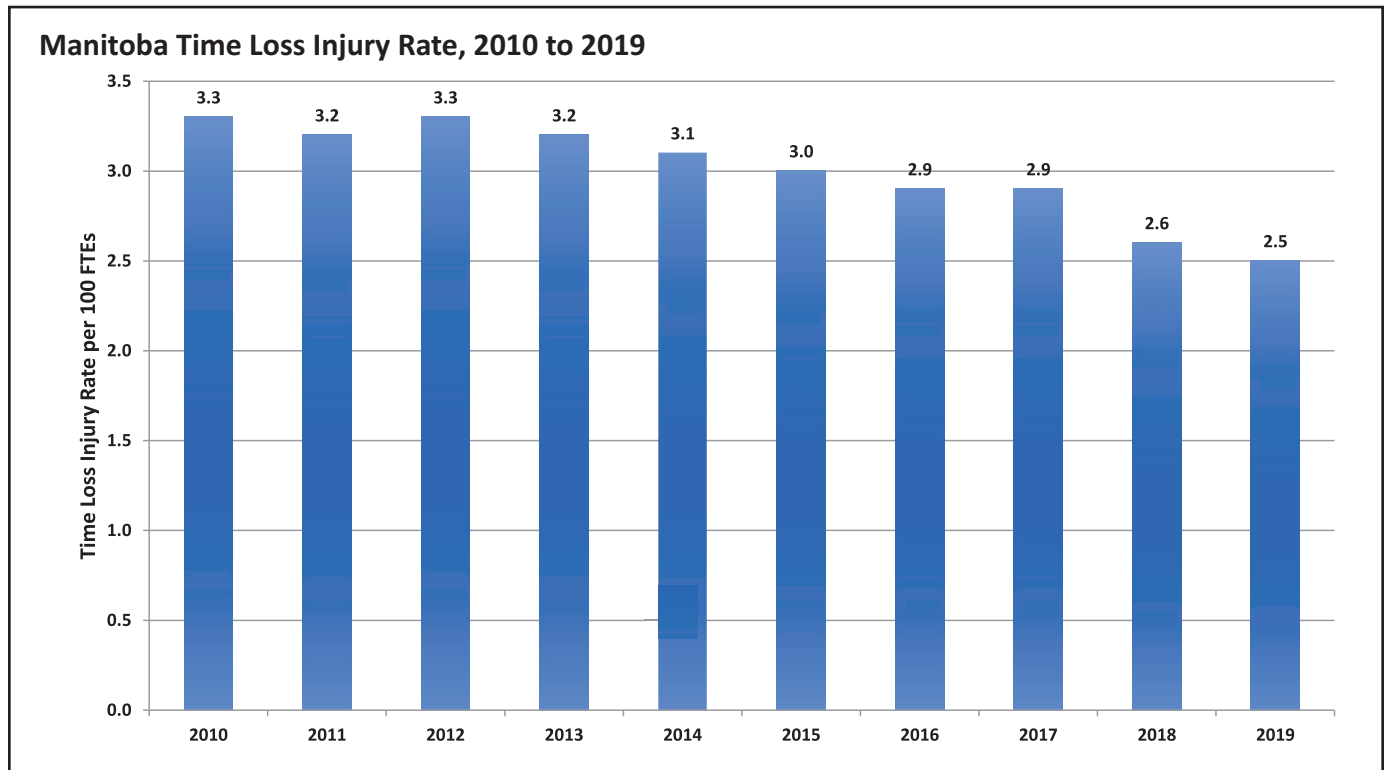
Follow these steps to interpret the bar graph.

- | | | |
|---|--|--|
| 1 | Scan the graph to locate the title. | What is the title of the graph? |
| 2 | <p>Locate the x-axis and the y-axis. The x-axis is horizontal and usually displays the categories. The y-axis is vertical and usually displays the quantities.</p> <p>The displays are reversed when the bars extend horizontally.</p> | <p>a) What does the x-axis display?</p> <p>b). What does the y-axis display?</p> |
| 3 | Locate the legend to identify the categories or subcategories for the graph. | What does the legend tell you? |
| 4 | Identify any additional information, such as data labels, found in the graph. | What additional information, if any, does this bar graph display? |

22.3: Bar Graphs Practice A

The graph below displays injury data from the Manitoba Workers Compensation Board (WCB). Follow the instructions in **22.2: Bar Graphs** to interpret the graph, then answer the questions below. Here are some things to note about the graph:

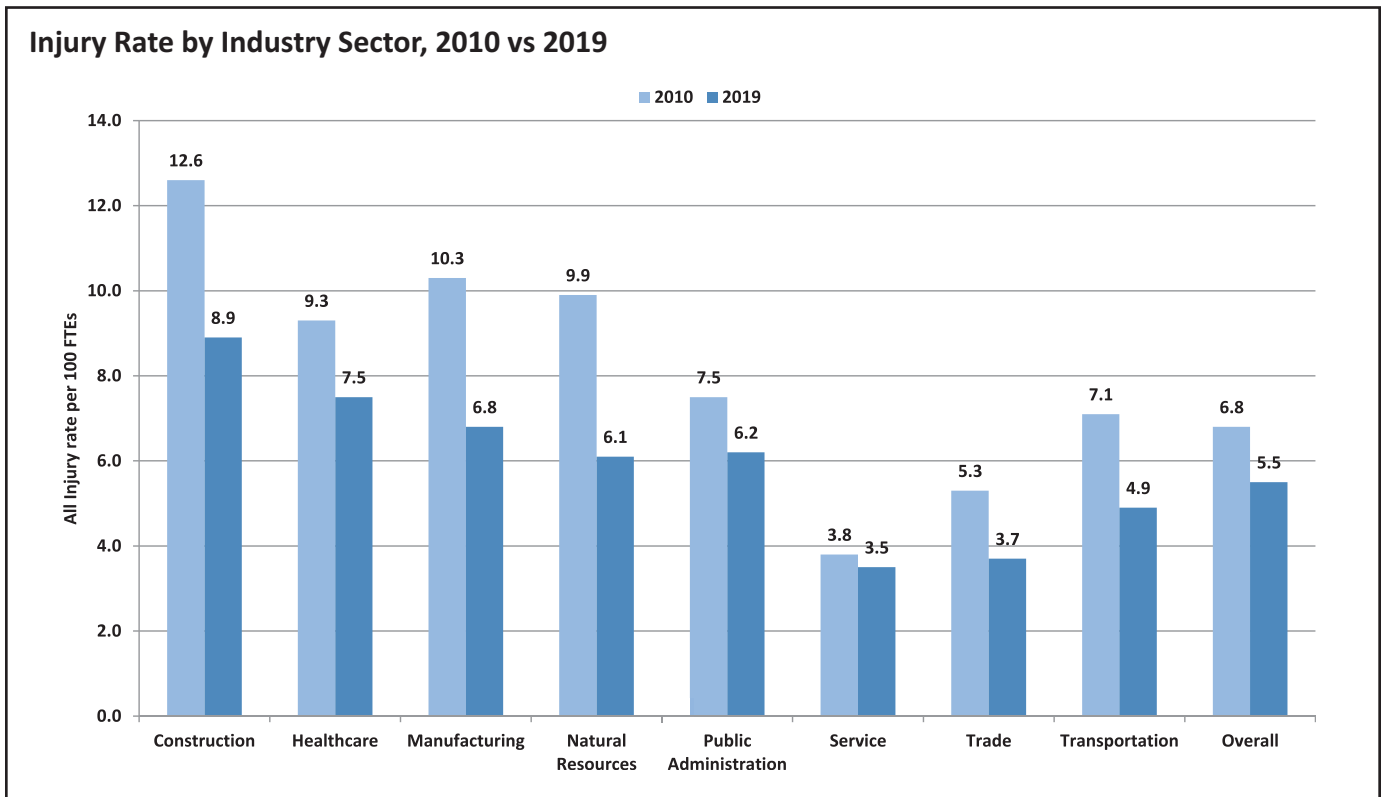
- Time loss injuries refer to workplace injuries which the WCB was notified of, and that were accepted by the WCB.
- FTE (in y-axis) refers to full-time equivalent employees.



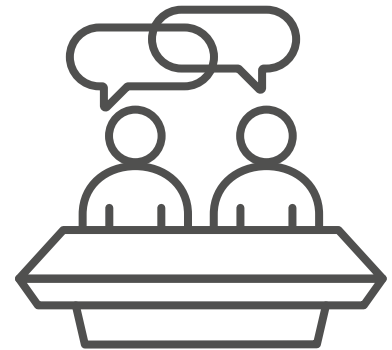
1. What was the time loss injury rate in 2016?
2. Which year has the lowest time loss injury rate?
3. Which two years had the highest time loss injury rate?
4. Which year had the same time loss injury rate as 2011?
5. What trend does the graph display?

22.4: Bar Graphs Practice B

Refer to the bar graph to complete the activities below.



1. Choose a partner to work with.
2. Interpret the graph together.
3. Make a list of at least five observations from the data displayed on the graph.
4. Present your analysis to the rest of class.



22.5: Creating Bar Graphs

1. Check the box that describes what you can do using Excel.

Tasks	Yes	A bit	No
a) Create a bar graph in Excel			
b) Change the formatting of a bar graph			
c) Add a title to a bar graph			

2. Need to learn more?



Yes, please!

Ask your instructor to help you learn or review these skills.



No, I'm good.

Use Excel to create a bar graph.

1. Create a workbook.
2. Enter the monthly expenses below into a spreadsheet.
3. Highlight the data and create a bar graph.
4. Add a title to the graph.
5. Save the workbook in a folder on the computer.

Monthly expenses	
Rent	\$700
Groceries	\$450
Cellphone	\$60
Transportation	\$150
Entertainment	\$100