

### Project Report

You are expected to compile a clear, well-organized, and fully justified report of your investigation and its results.

Your report should include:

- title that indicates the purpose of your project
- statement of your hypothesis
- background of your problem
- procedure and use of technology
- raw data such as graphs, charts, or tables, indicating sources
- summary of data in tables, graphs, and summary statistics
- analysis of your data, including calculations, and graphs
- results
- conclusions
- evaluation of your conclusions and of your investigation
- footnotes or endnotes and bibliography



### Project Presentation

You are expected to present your culminating project in a clear and coherent manner. The presentation must be done within a restricted length of time and it must use communications technology effectively. The presentation should outline your investigation and its results, and should include a critical evaluation of your methodology and conclusions.

Knowing that you must present your project to others may influence the problem you decide to investigate, and how you decide to organize and analyse your data. As you progress through your investigation, you need to keep in mind that you will be presenting your findings.

Refer to **Appendix D: Oral Presentation Skills** on page 598. This appendix outlines in detail the important elements of a presentation. You will need to keep these in mind as you work through your project. If possible, rehearse your presentation with a classmate. Ask for feedback to improve your presentation before presenting it to the class.

## Project Critiquing

Critiquing a project involves:

- identifying the strengths of the presentation
- identifying any problems or concerns with the presentation
- making suggestions to the presenters to help them improve future presentations

There are two distinct aspects to critiquing a presentation. The first is an evaluation of the presenter. Here, such things as audibility and clarity are evaluated from the perspective of the audience.

The second aspect to critiquing a presentation in this course is a critique of the mathematics involved in the project.

## Maintaining the Quality in Your Presentation and Written Report

Use the following checklist to ensure that your written report and your presentation are high quality mathematical products. You can use this checklist to quickly identify strengths and weaknesses in your own presentation and in the presentations of others.

### Mathematics Content Checklist

- ✓ Mathematical terminology is used correctly throughout.
- ✓ Mathematical terminology is used consistently throughout.
- ✓ Mathematical notation is used correctly throughout.
- ✓ Mathematical notation is used consistently throughout.
- ✓ Mathematical content is correct.
- ✓ Mathematical content is complete.
- ✓ Mathematical development is logical.
- ✓ All important steps in mathematical development are included.
- ✓ Any assumptions used in your analysis are explicitly stated.
- ✓ Any limitations of your analysis are identified.

- ✓ Any limitations of your analysis are explicitly stated.
- ✓ Possible extensions of your analysis are identified.
- ✓ Possible extensions of your analysis are discussed.
- ✓ Conclusions follow logically from your analysis.
- ✓ Possible audience questions are identified in advance.
- ✓ Answers to possible audience questions can be justified mathematically.

## Practise

1. Think of an excellent presentation you have experienced. List five reasons why it was so good.
2. Make a list of common problems that are encountered when students explain mathematical reasoning to the class.
3. Presentation technology has many features that can enhance a report. List features that you find effective or ineffective based on presentations you have seen.
4. How can you distinguish between the style and content of a presentation while it is in progress?

### Moving Your Project Forward

1. Present your culminating project.
2. Critique the presentations of other students in your class.