

Functions

University/College

Preparation (MCF3M)

A Financial Report

The Task

Students were presented with the following scenario:

The Winters family currently rents a place of residence. The family has decided to purchase a house and has sought advice from a financial adviser. You are to assume the role of a financial adviser and provide a detailed report for the Winters family, outlining your analysis of their financial situation and making recommendations, with supporting rationale, for an appropriate mortgage. (See Appendix: Scenario.)

Final Product

Each student was to submit a financial report that contained:

- an analysis of the Winters family's financial situation;
- one-time costs, such as closing and moving costs, to be considered when buying a house;
- a recommended down payment;
- monthly expenses (e.g., property taxes, utilities, insurance, food, car payments);
- verification of mortgage payments that is based on examination of interest rates and amortization periods;
- calculations that are appropriately labelled and presented in an organized fashion;
- a recommendation for an appropriate mortgage, with supporting rationale;
- a bibliography.

Expectations Addressed in the Exemplar Task

This task gave students the opportunity to demonstrate achievement of all or part of each of the following overall and specific expectations from two strands: Financial Applications of Sequences and Series, and Tools for Operating and Communicating with Functions.

Students will:

1. solve problems involving compound interest and present value;
2. solve problems involving financial decision making, using spreadsheets or other appropriate technology;
3. analyse the effects of changing the conditions of a mortgage;
4. communicate the solutions to problems and the findings of investigations with clarity and justification;
5. communicate solutions to problems and to findings of investigations clearly and concisely, orally and in writing, using an effective integration of essay and mathematical forms;
6. demonstrate the correct use of mathematical language, symbols, visuals, and conventions.

For information on the process used to prepare students for the task and on the materials and resources required, see the Teacher Package reproduced on pages 61–66 of this document.