

Each Quiz can be Different

An element of randomness can be used in the generation of a quiz document.

A student may attempt the 'same' quiz many times; each will be slightly different.

This is used to alter numerical aspects for each quiz instance.

One way uses the *Mathematica*² software [11] to generate the exact contents of each question and its worked solution.

Randomness applies to order of answer choices.

Repeat the same quiz as many times as necessary, to achieve a 100% score.

Students cannot 'cheat' by presuming, for example, that the correct answer to question 5 will always be 'b'.

²*Mathematica* is a trademark of Wolfram Research Limited.[11]

Evaluating Student Progress

Student log-file pages are also accessible from the staff/instructor [interface page](#).

This page allows access to:

- **log-files for the available quizzes;**
- **log-files for individual students;**
- **statistical information for a whole class of students;**
- **as formatted HTML tables or raw text form.**

Quiz Management

All management aspects of the MacQIEX quiz system are handled from the staff/instructor [interface page](#).

This page provides access to allow the following tasks:

- **design a new Quiz**
- **edit/modify an existing Quiz**
- **recover already used Quiz instances**
- **view student log-files**
- **make a login page for student access**
- **general house-keeping duties**

Designing a Quiz

Also accessible from the staff/instructor [interface page](#) is the interface for creating new quizzes.

- **choose up to 12 questions for a quiz;**
- **from 14 areas of basic mathematics;**
- **up to 6 types of question in each area;**
- **use pop-ups and text-fields to make choices;**
- **can choose all questions from the same area;**

This is only the first step in the process of creating quiz instances to be available for student use. All the files resulting from these choices may be edited.