

Maple T.A. Tips and Techniques - Fill-in-the-Blank Questions

Introduction

When creating a fill-in-the-blanks question with Maple T.A., you have a variety of options. You can create questions that contain one blank or multiple blanks. The blanks can be either text regions or drop-down menus of options, and you can specify whether to use exact or relaxed grading routines. This article discusses the three main question types that can be used to create fill-in-the-blanks questions.

In this article, authoring using the Question Bank Editor is highlighted. The Question Bank Editor provides an easy-to-use interface for creating questions. It does not support all question types and options, though. Where appropriate or necessary, plain-text scripting or LaTeX authoring is mentioned. All question types in Maple T.A. can be created using plain-text scripting or LaTeX authoring.

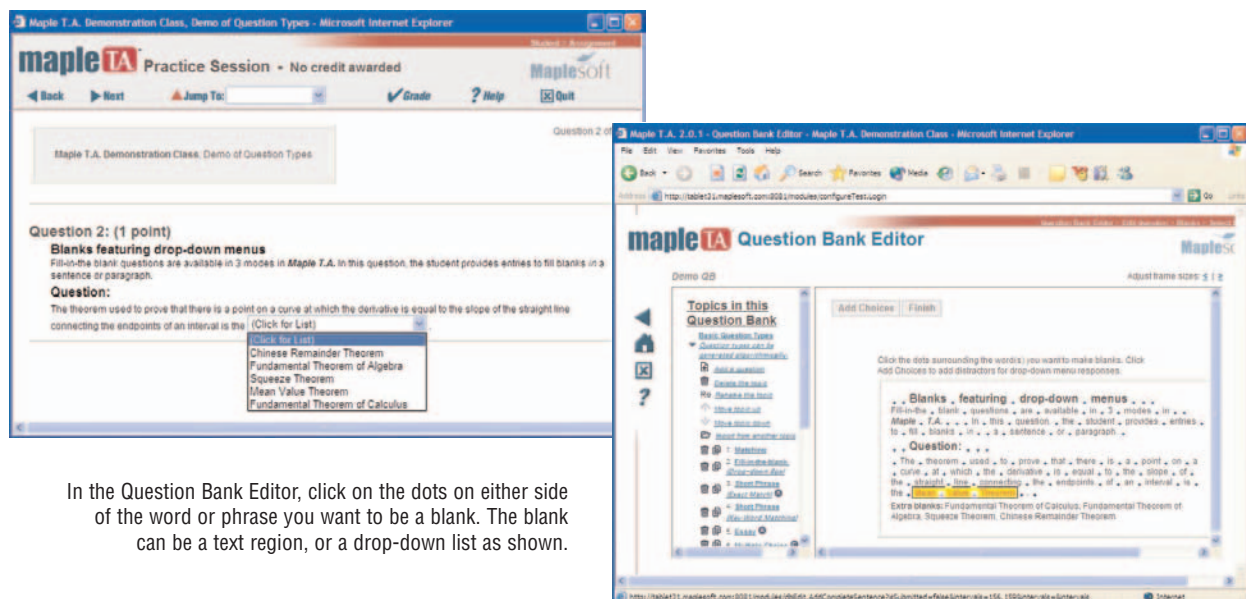
Fill in the Blanks

The fill-in-the-blanks question lets you enter in the text of a full answer and then select a word or phrase that you would like to be blank. You can create a basic fill-in-the-blanks question using the Question Bank Editor.

To create a fill-in-the-blanks question:

1. Add a question in the Question Bank Editor.
2. From the Question Type drop-down list, choose Fill in the blanks.
3. Enter a description for the question and then click Next.
4. Enter in the fully filled out answer in the editing region.
5. Select either Textboxes or Menus and click Next.
6. Click the dots surrounding the word or answer you want to make blanks.
7. If you chose the Menus option, click Add Choices to enter additional words for the drop-down menu, then click OK. Click Add Choices to enter additional words for the drop-down menu, if you chose the Menu option. Then click OK.
8. Click Finish.

When creating a fill-in-the-blanks question in the Question Bank Editor that has multiple blanks, each blank will be of the same type and provide the same list of choices. If you want each blank to have its own properties, use plain-text scripting or LaTeX authoring.



In the Question Bank Editor, click on the dots on either side of the word or phrase you want to be a blank. The blank can be a text region, or a drop-down list as shown.

List Questions

The List question is similar to a fill-in-the-blanks question, but offers additional functionality. You can specify multiple correct answers and give partial credit for incorrect answers. You can also include response-specific feedback. This question type is available in the Question Bank Editor through the Inline question.

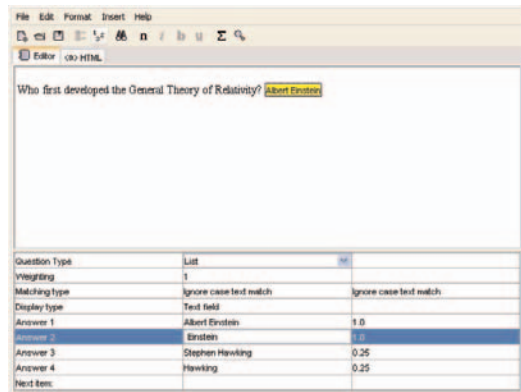
To create a list question:

1. Add a question in the Question Bank Editor.
2. From the Question Type drop-down list, choose Inline.
3. Enter a description for the question and then click Next.
4. Enter in the fully filled out answer in the editing region.
5. Select the word or answer where you want the blank to be positioned.
6. From the Insert menu, choose Insert SRO (Student Response Object).
7. In the SRO Properties Panel at the bottom of the screen, select List question from the Question Type drop-down box.
8. Once you have finished setting the properties for the question, click Finish.

You can customize your question by choosing the type of grading to be used (exact, ignore case, or regular expression matching), the type of answer field (drop-down menu or text region), and additional answers. If providing extra answers, you have the choice of giving partial credit (between 0 and 1) for each of the additional answers.

List questions also support response-specific feedback. This is the only functionality of the list question that isn't supported in the Inline editor of the Question Bank Editor. To create response-specific feedback, you need to use plain-text scripts or LaTeX authoring.

To have multiple blanks in the question, you simply select a different word or answer and repeat the process. In the Inline question type, each blank is treated separately and will have its own list of possible answers. In fact, each blank can be of any of the question types supported in the inline editor: list, multiple choice, formula, Maple-graded, numeric, or essay. You are not limited to one question type in an Inline question.



This close-up of the inline editor shows multiple correct answers specified in the SRO Properties Panel and partial credit being given for certain answers.

The image contains two side-by-side screenshots of the grading interface for the list question. Both screenshots show the question text "Who first developed the General Theory of Relativity?" and a comparison between the student's response and the correct response.

Left Screenshot (Grade: 100%): The student's response is "Einstein" and the correct response is "Einstein". The grade is 100%. A green checkmark icon indicates a correct answer.

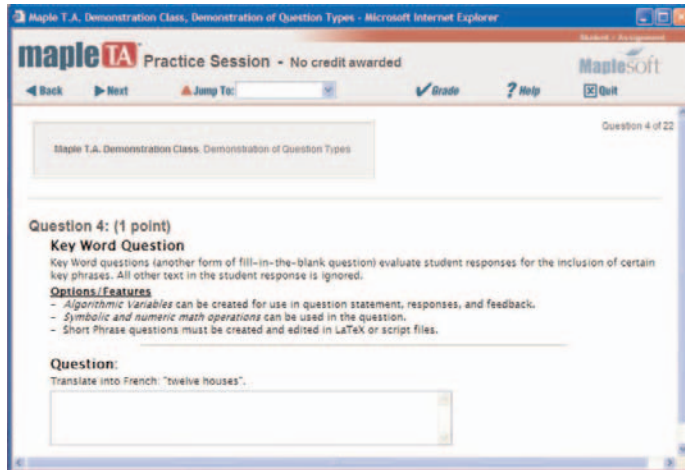
Right Screenshot (Grade: 25%): The student's response is "Hawking" and the correct response is "Albert Einstein". The grade is 25%. A red X icon indicates an incorrect answer. The total grade calculation is shown as $0.25 \times 1 \times 1 = 0.25 = 25\%$.

Previews of the question and grading show that Einstein is given full marks, while Hawking is given .25.

Key Word or Phrase

In Key Word or Phrase questions, the text of the student response is checked for key words that have been specified by the instructor. The system ignores other text, extra white space, and capitalization in the student response. So, the student would get full credit if they use the key words anywhere in their response.

This question type can only be created using plain-text scripts or LaTeX authoring.



In this question type, any answer that contains the two words "douze" and "maisons" would be marked correct.

For example, "douze maisons" or "The translation is douze maisons" would both receive full marks.

Summary

There are three main question types that can be used to create fill-in-the-blanks style questions: fill in the blanks, key word or phrase, and list. Of these, the easiest to create and the one that provides the most options from within the Question Bank Editor is the list question, which is found as a question type inside the inline question.

For more information on any of these question types, plain-text scripting, or LaTeX authoring, see the Advanced Authoring section of the online Instructor Help.



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