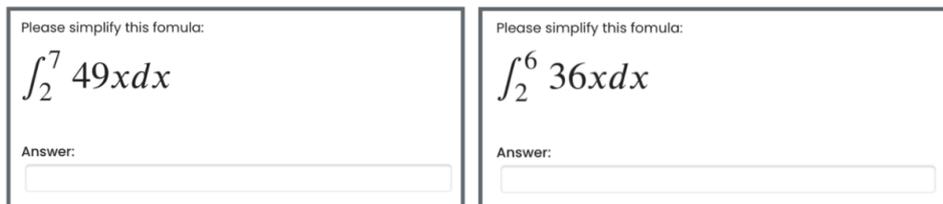


Variable Numeric Set question type



Please simplify this fomula:

$$\int_2^7 49x dx$$

Answer:

Please simplify this fomula:

$$\int_2^6 36x dx$$

Answer:

An example of Variable Numeric Set question type

Overview:

This guide will show you how to create a Variable Numeric Set question type.

What to know:

The features of Variable Numeric Set question type is listed below.

1. It supports random variables into the questions. (As can be seen from the example above, one student see the question as the first picture, while another student see the question as the second picture. It is this question uses random variables.)
2. It supports variables defined by other expressions.
3. It supports variables with multiple pre-defined values.
4. It supports answer tolerance and the use of units.

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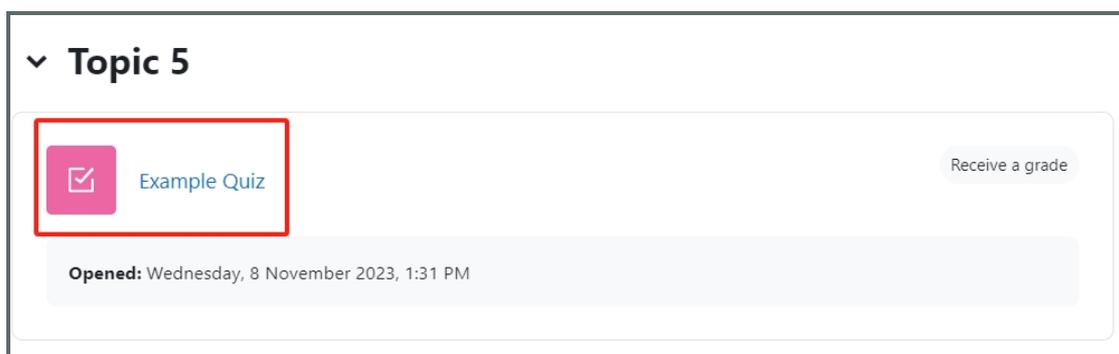
[Step 4: Choose a question type](#)

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Step 1: Access the Quiz activity where you want to create the question

In your module area/course, click the link of the Quiz activity where you want to create a question.



▼ **Topic 5**

Example Quiz Receive a grade

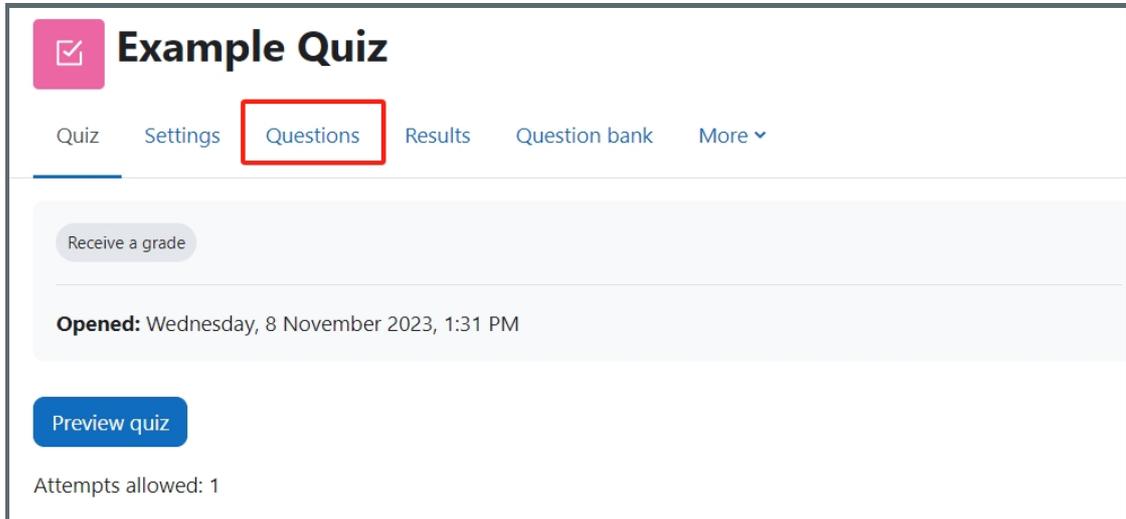
Opened: Wednesday, 8 November 2023, 1:31 PM

Note: If an appropriate Quiz activity doesn't exist in your module area/course, please see [Add a quiz](#) for details of how

to create one.

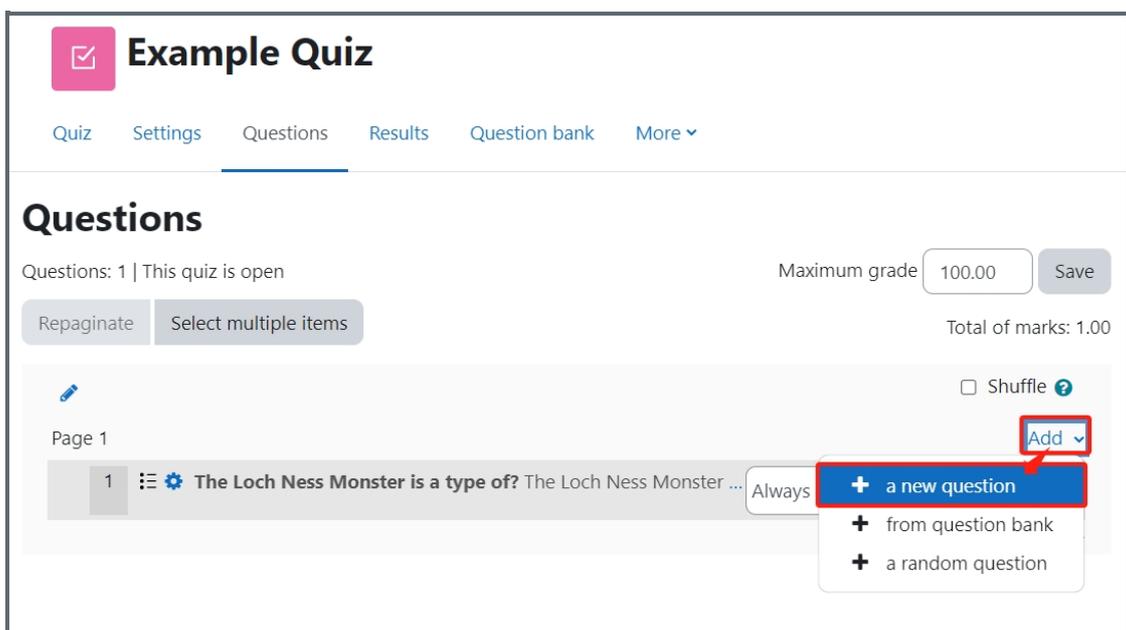
Step 2: Open the 'Questions' tab

1. Open the 'Questions' tab



Step 3: Add a new question

1. On the following page, click the 'Add' link.
2. Click the 'a new question' link in the dropdown menu.



Step 4: Choose a question type

1. Locate and select the Variable Numeric Set question type from the pop-up window.
2. Click the 'Add' button.

Choose a question type to add
✕

 Numerical

$2+2=?$ Calculated

$2+2=?$ Calculated simple

$2+2=?$ Calculated multichoice

x^2 Variable numeric

$\{1,2\}$ Variable numeric set

$\{a\}m$ Variable numeric set with units

 STACK

 VPL Question

 CodeRunner

Allows a numeric response, question can have several 'variants', expressions are pre evaluated for each question variant

Add

Cancel

Step 5: Settings

The settings of Variable Numeric Set question type is very similar to the 'Variable Numeric' question type. The only difference is the definition of variables (Step 8 of Guide of 'Variable Numeric' question type). Please refer to the guide for general settings: [Guide of Variable Numeric Set question type](#) .

Step 8: Set up variables

There are still two types of variables in variables:

1. Calculated variable: the same with 'Variable Numeric' question type, e.g. value b .
2. Predefined variable: the values that can be given to the variable is unlimited, e.g. value a .

Variables

Predefined variable ↕

Variable 1 ?

a

Value for variant 1 ?

2

Value for variant 2

4

Value for variant 3

6

Value for variant 4

8

Value for variant 5

10

Add 2 more blanks for more variants

Calculated variable ↕

Variable 2 ?

$b=a/2$

Value for variant 1 ?

Value for variant 2

Value for variant 3

Value for variant 4

Value for variant 5

Tips:

The random variables, such as variable a and b, need to be covered with '[[]]', the whole formula needs to be covered with '\$\$' before and after so that the system knows it is a random variable.

Note:

For more information about Variable Numeric question type, please access the official documentation:

<https://www.open.edu/openlearncreate/mod/oucontent/view.php?id=52747§ion=2.1.2>

Online URL: <https://knowledgebase.xjtlu.edu.cn/article/variable-numeric-set-question-type-179.html>