

# Variable Numeric Set with Units question type

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3386 0

Please simplify this formula:  
 $\int_2^7 49x dx$   
Answer:

Please simplify this formula:  
 $\int_2^6 36x dx$   
Answer:

An example of Variable Numeric Set with Units question type

## Overview:

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

## What to know:

The features of Variable Numeric Set with Units question type are listed below.

1. It supports random variables in the questions. ( As can be seen from the example above, one student sees the question as shown in the first picture, while another student sees the question as shown in the second picture. It is because 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 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**

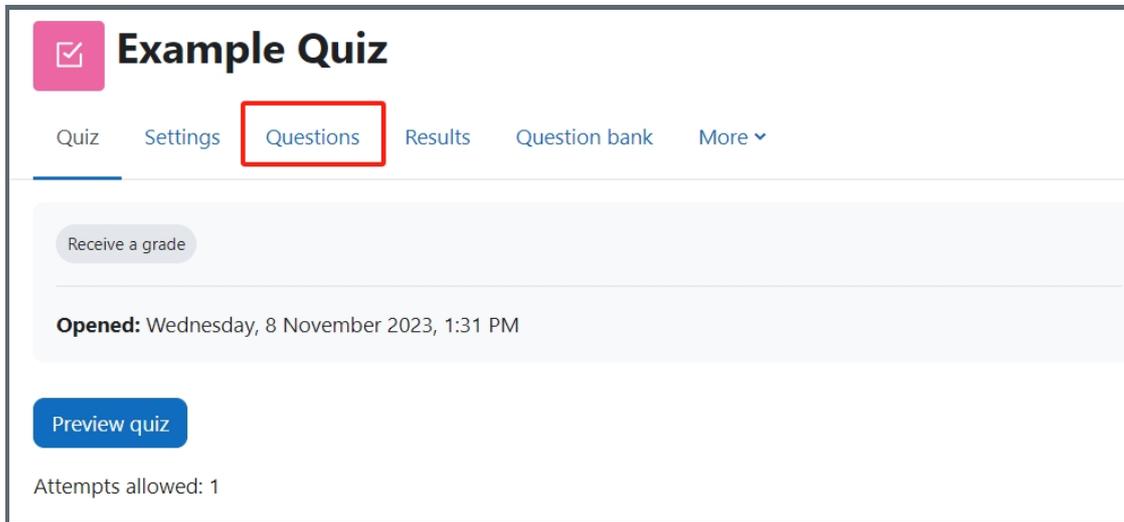
Example Quiz Receive a grade

**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

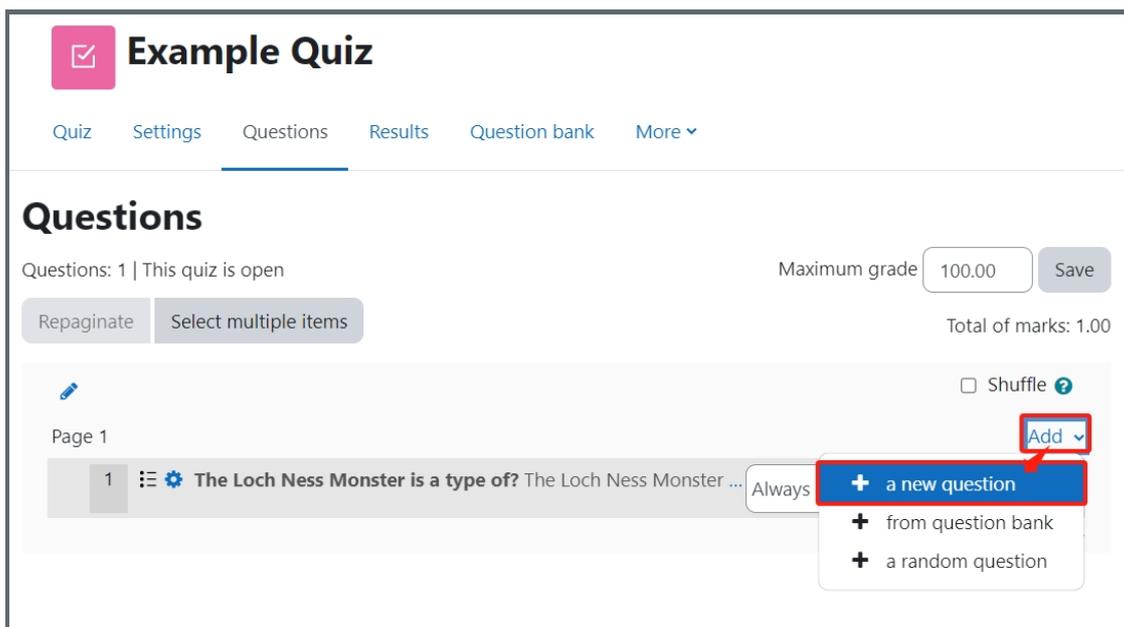
1. Open the 'Questions' tab



The screenshot shows the 'Example Quiz' interface. At the top, there is a navigation bar with tabs: Quiz, Settings, Questions (highlighted with a red box), Results, Question bank, and More. Below the navigation bar, there is a 'Receive a grade' button. The main content area displays 'Opened: Wednesday, 8 November 2023, 1:31 PM' and a 'Preview quiz' button. At the bottom, it shows 'Attempts allowed: 1'.

## 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.



The screenshot shows the 'Example Quiz' interface with the 'Questions' tab selected. The main content area displays 'Questions: 1 | This quiz is open' and 'Maximum grade 100.00'. There are buttons for 'Repaginate' and 'Select multiple items'. The 'Total of marks: 1.00' is shown. A question is listed: '1 The Loch Ness Monster is a type of? The Loch Ness Monster ... Always'. An 'Add' dropdown menu is open, showing options: '+ a new question', '+ from question bank', and '+ a random question'. The 'Add' button and the 'a new question' option are highlighted with a red box.

## Step 4: Choose a question type

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

Choose a question type to add ✕

- $2+2=?$  Calculated
- $2+2=?$  Calculated simple
- $2+2=?$  Calculated multichoice
- $x^2$  Variable numeric
- $\{1,2\}$  Variable numeric set
- $\{1\}m$  Variable numeric set with units
- STACK
- VPL Question
- CodeRunner

OTHER

- Description

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

## Step 5: Settings

The settings of Variable Numeric Set with Units question type is very similar to the 'Variable Numeric Set' question type. The only difference is the ability to add units. Please refer to the guide for general settings: [Variable Numeric Set question type](#).

## Step 6: Set up units

In Unit section, please set up the unit and the grade of the unit.

You can set multiple units to be the correct units.

Units ▲

Unit 1 ? kg

Spaces in units Remove all spaces before grading ▾

Spacing feedback ? You are required to put a space between the number and the unit.

Replace dashes No ▾

Grade 100% ▾

Feedback

### 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&section=2.1.2>

Online URL: <https://knowledgebase.xjtlu.edu.cn/article/variable-numeric-set-with-units-question-type-180.html>