



Assessments: Calculated Questions

With this question type, students are required to apply mathematical operations to answer the question. Each student receives one of several unique number sets for solving the problem.

Pounds to Kilos	
If a woman weighs 185 pounds and she weighs 88.6 in kilograms, how many kilograms are there in a pound?	
Answer	<input type="text" value="2.2"/>
Units	<input type="text" value="kgs"/>

To create calculated questions, you design the question using variables in place of numbers. Then you enter a formula to randomly generate values for each variable in the question.

To create a calculated question and answers:

1. Enter the formula and enclose variables in square brackets. This formula is used to generate values to replace the variables within the question text.

The variables will be replaced with values when the student views it.

Question text: Enable HTML Creator

If a woman weighs [x] pounds, and she weighs [y] in kilograms, how many kilograms are there in a pound?

Enter variables in brackets.

Use HTML Insert equation: New ➤

Formula:
 Enclose variables in square brackets. Example: [x] + [y]. Values for variables will be inserted when the answer set is generated. You can also use constants in place of variables.
[View a list of supported formulas.](#)

[x]/[y]

Units:
kgs Required Ignore spaces Ignore case
 Percentage of the question value: 5

Analyze Variables Cancel

2. Indicate the answer units, whether they are required, and what percentage of the answer they're worth.
3. Click **Analyze Variables** to display the settings for the variables and answers.

Variables:

x Minimum: 125 Maximum: 200 Calculate to 0 decimal places

y Minimum: 56.8 Maximum: 90.9 Calculate to 1 decimal places

Answers

Answer Set:
 Specify the number of answers per set 10
 Calculate the answer sets to 1 Decimal
 Answer Tolerance (+/-): 1 Units: Percent

Generate Answer Set Cancel

4. Enter the minimum and maximum values for each variable.
5. For the Answer Set, select how many answer sets should be generated, the number of decimal places, and the answer tolerance (the range of answers that should be considered correct).

6. Click **Generate Answer Set**.
7. Click **Save**.