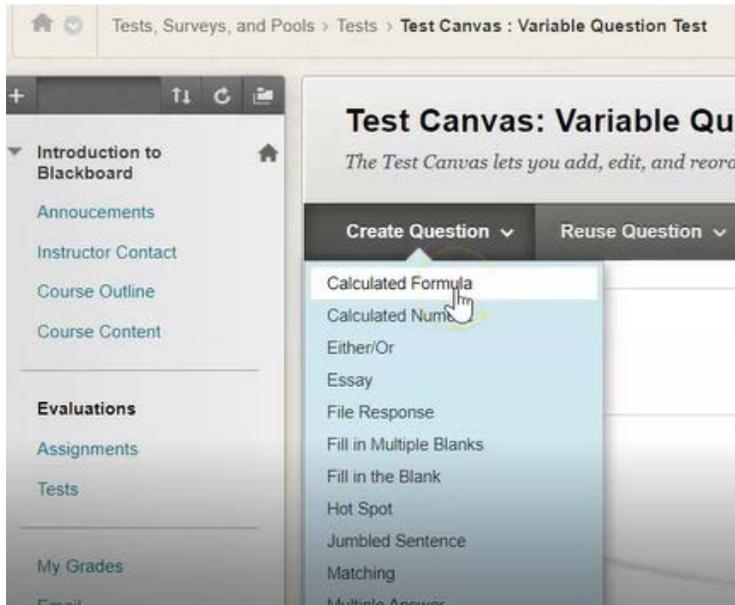


BLACKBOARD

Using Variables in your Question

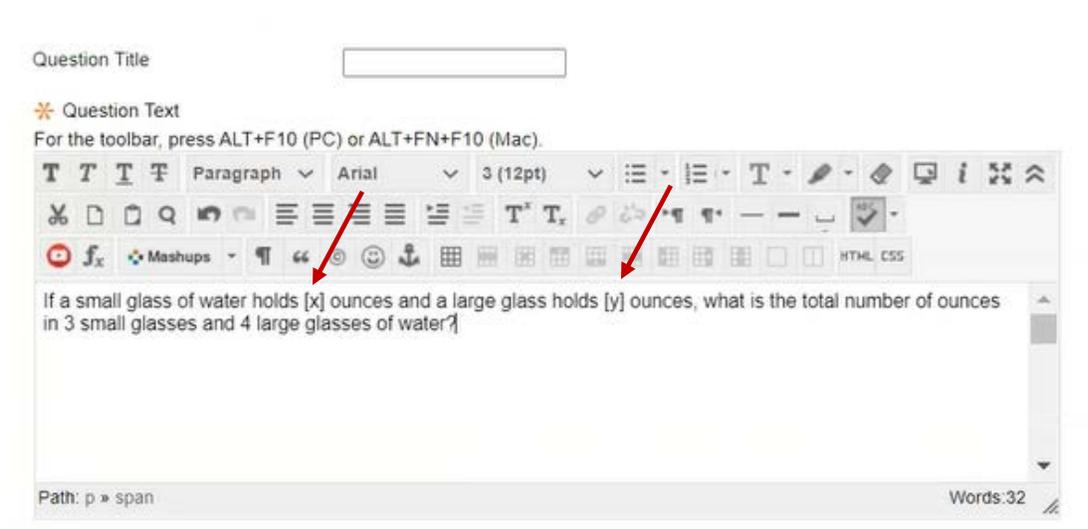
CALCULATED FORMULA

Another way to create individualized test questions is by using the Calculated Formula



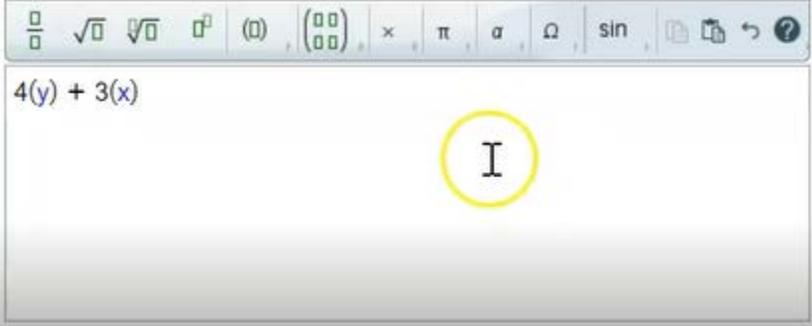
This question type, works anytime, but there is a formula that can be used to figure out the answer. This type of question will include variables in square brackets corresponding to variables in the formula that will be used to calculate the answer.

First variable is [x]. The second variable is [y].



So for this question, you must enter a formula below so that Black Board can determine if the student is correct or incorrect with their answer.

★ Answer Formula



$4(y) + 3(x)$

You can also specify an answer range. If you will accept an answer that is a little bit outside the exact amount.

OPTIONS

Define the correct answer range, plus or minus a numeric or a percentage value. You can also specify a broader range for partial credit and the percentage of the total points that will be deducted from the total points if the unit is required.

★ Answer Range +/- Numeric ▾

Allow Partial Credit

Units Required

You can allow or partial credit. You can also indicate that units are required to get this answer correct. In this case, leave it all blank. Then click Next.

You now must define the variables, x and y. Give each a minimum value and a maximum value. Enter the following values:

DEFINE VARIABLES

Tip: you can use scientific/exponential notation to represent numeric values. Eg., -0.0001 can be written as 1.0E-4 or as 1.0E-4. Spaces are allowed.

	Variable Name	Minimum Value	Maximum Value
1.	x	<input type="text" value="1"/>	<input type="text" value="20"/>
2.	y	<input type="text" value="25"/>	<input type="text" value="45"/>

Decimal Places
0
0

You can also put decimal places if you wanted the questions to have a value that had decimals.

ANSWER SET OPTIONS

Calculate Answers to 0 Decimal

Number of Answer Sets 1

Correct Answer Format 3

Click **Calculate** to generate new answer sets. Click **Next** to go to the next page. Click **Back** to go back to the previous page. Click **Cancel** to cancel.

You can also indicate that the answer has that decimal and to what value.

ANSWER SET OPTIONS

Calculate Answers to 0 Decimal

Number of Answer Sets 15

Correct Answer Format Normal

By default, Blackboard will calculate 10 numbers of answer sets. If you would like to increase this to perhaps, 15. Just put the new value in as seen below.

ANSWER SET OPTIONS

Calculate Answers to 0 Decimal

Number of Answer Sets 15

Correct Answer Format Normal

To indicate the right answer. Whether you want it written out or in exponential form.

calculating existing answer sets if answer sets have already been

Go Back Cancel Calculate **Next**

Leave it at normal and click Next.

This now shows you all of the answer sets you just generated with the numbers you put in.

EDIT ANSWER SETS

Tip: you can use scientific/exponential notation to represent numeric values. Eg., -0.0001 can be written as 1.0e-4 or as 1.0E-4. Spaces are not allowed.

	x	y	Calculated Answer (0 Decimal places)	
1.	8	29	140	Remove
2.	7	34	157	Remove
3.	15	42	213	Remove
4.	17	32	179	Remove
5.	11	32	161	Remove
6.	19	28	169	Remove
7.	6	44	194	Remove
8.	14	31	166	Remove
9.	3	28	121	Remove
10.	1	42	171	Remove
11.	2	33	138	Remove

If there is an answer set that you do not want to use, simply click remove to remove it from the set and it will automatically add another.

When you are satisfied with your question, you then click **Submit** on the bottom right.

Go Back Cancel **Submit**

1. Calculated Formula: If a small glass of water holds [x]&n...

Success: Question edited.

Question	If a small glass of water holds [x] ounces and a large glasses of water?
Answer Formula	$4(y) + 3(x)$
Precision	Decimal
Answer Range +/-	± 0
Number of Answer Sets	15

This question now has 15 possibilities with the values given to the student.

So when the student takes the test, there will be 15 separate questions that could be given.

QUESTION 1 10 points Save Answer

If a small glass of water holds 2 ounces and a large glass holds 33 ounces, what is the total number of ounces in 3 small glasses and 4 large glasses of water?

Click Save and Submit to save and submit. Click Save All Answers to save all answers.

Save All Answers **Save and Submit**

So as you can see, here's the questions, with the amounts put in. When a student enters their mark and completes the test Blackboard will automatically mark every question.

