## **Qualtrics - Math Operations Advanced**





Use code to perform math operations in your survey. You can then display the output to the respondent and record it in your data.

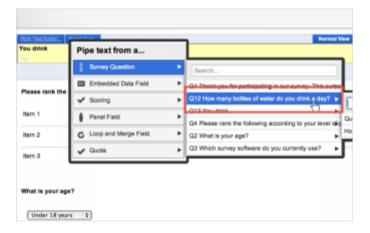
#### Set up a Math Operation

- 1. Paste the following code into your question text or answer choice text:
  - \$e{ your expression here }
- 2. Place your mathematical operation within. The output for the expression will be displayed wherever you put the code into your survey. Examples:
  - \$e{4 + 4} Resolves to 8.
  - \$e{(4+4)/2} Resolves to 4.
  - o \$e{4\*4} Resolves to 16.

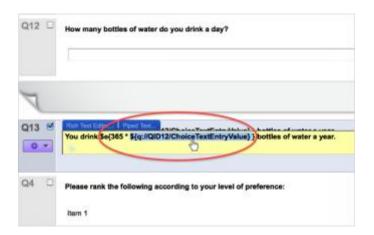
#### Math Operations with Piped Text

If you want to run an equation using numbers that were entered by the respondent in a previous question, you can do this using <u>piped</u> <u>text code</u>:

1. Generate your piped text codes from the Piped Text tab. You will need to know which questions you are piping from.



2. Paste the piped text codes into the math expression. The system will pull in the numbers the respondent has entered into the previous question and run the equation.





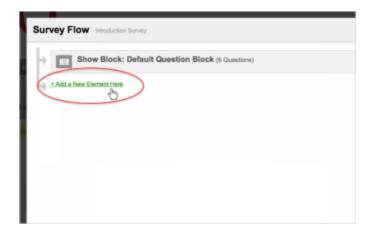
### **Record the Output**

To record the output of the equation with your data:

1. First place your math operation code into the question where you want the output displayed to the respondent.



2. Click into the Survey Flow and click on Add a New Element Here.

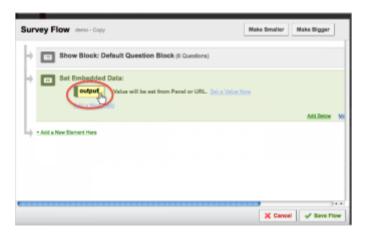


3. Make the element an **Embedded Data** element.

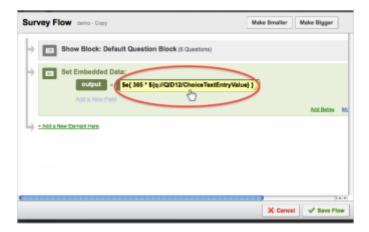




4. Set the Field name to "output".



5. Click **Set a Value Now** and paste your math operation code in as the value.



Your downloaded data will contain a column called "output" which will contain the outputs for each respondent.

# More Information QTips

- Remember the order of operations. Operations within parentheses will be evaluated before the rest of the operations.
- - Example: \$e{round(10/3,2)} will now resolve to 3.33. "round" tells it to round up, and the ",2" tells it to round to two decimal places after the operation is done.