

Bracketing Method

When more than two numbers are involved in an equation, the bracketing method allows for easier step-by-step calculations compared to attempting to do all calculations at once.

Example 1:

$$4(8-4) + 3 = x$$

1. Determine the order of operations and set up brackets

$$4(8-4) + 3 = x$$

The diagram shows the equation $4(8-4) + 3 = x$ with three levels of bracketing. A small bracket labeled #1 is under the subtraction $8-4$. A larger bracket labeled #2 is under the multiplication $4(8-4)$. The largest bracket labeled #3 is under the addition $4(8-4) + 3$.

2. Calculate based on the order determined

$$4(8-4) + 3 = 19$$

The diagram shows the equation $4(8-4) + 3 = 19$ with the same bracketing as in step 1. The result of the subtraction $8-4$ is 4 , shown in red. The result of the multiplication 4×4 is 16 , shown in green. The final result of the addition $16 + 3$ is 19 , shown in blue.

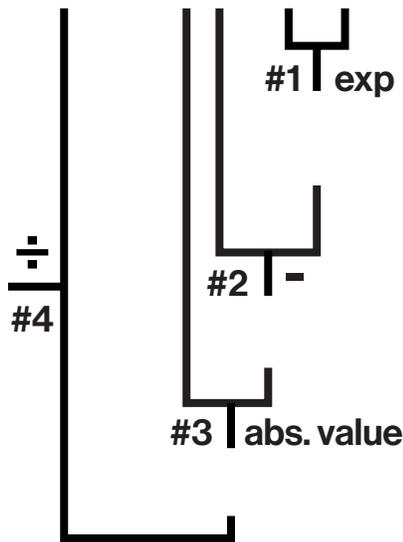
Bracketing Method

Example 2:

$$(95 \div [|5 - \{5\}^2|]) = x$$

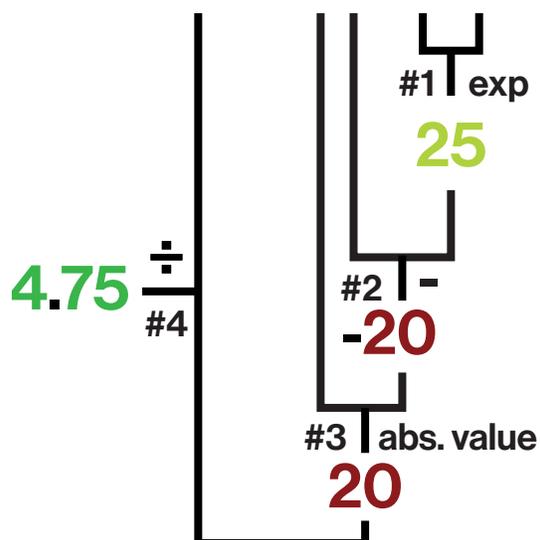
1. Determine the order of operations and set up brackets

$$(95 \div [|5 - \{5\}^2|]) = x$$



2. Calculate based on the order determined

$$(95 \div [|5 - \{5\}^2|]) = 4.75$$



Bracketing Method

Example 3:

$$\frac{10 - 24 + 72}{24 + 38 - 60} = X$$

1. Determine the order of operations and set up brackets

$$\frac{10 - 24 + 72}{24 + 38 - 60} = X$$

2. Calculate based on the order determined

$$\frac{10 - 24 + 72}{24 + 38 - 60} = 29$$