

**Answer on Question #86091 – Math – Algebra**

**Question**

Given  $f(x) = 1 - x$  and  $g(x) = 1 + x$ , find the function of  $f \circ g$ .

**Solution**

The answer depends of the notaion. Normally,  $g \circ f$  means  $g(f(x))$  and  $f \circ g$  means  $f(g(x))$ .

$$f(g(x)) = 1 - (1 + x) = 1 - 1 - x = -x.$$

$$g(f(x)) = 1 + (1 - x) = 1 + 1 - x = 2 - x.$$

**References:**

1 [https://en.wikipedia.org/wiki/Function\\_composition#Alternative\\_notations](https://en.wikipedia.org/wiki/Function_composition#Alternative_notations)

2 [https://en.wikipedia.org/wiki/Function\\_composition#cite\\_note-1](https://en.wikipedia.org/wiki/Function_composition#cite_note-1)