Composition of Functions

Ways to show functions are being composed:

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What does it mean to compose two functions?

Always start with the _____

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DANGER:

Example: $f(x) = 2x+3$ and $g(x) = x^2$

"x" is just a placeholder, and to avoid confusion let's just call it "input":
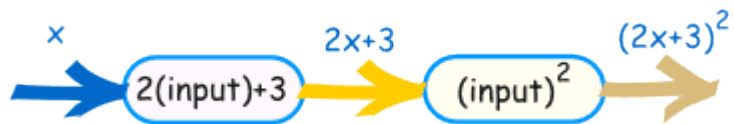
$$f(\text{input}) = 2(\text{input})+3$$

$$g(\text{input}) = (\text{input})^2$$

So, let's start:

$$(g \circ f)(x) = g(f(x))$$

First we apply f, then apply g to that result:

$$(g \circ f)(x) = (2x+3)^2$$