# Exercise 85

For the following exercises, let $F(x) = (x+1)^5$, $f(x) = x^5$, and $g(x) = x + 1$.

True or False: $(g \circ f)(x) = F(x)$.

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**Solution**

Write $(g \circ f)(x)$.

$$(g \circ f)(x) = g(f(x))$$
$$= (x^5) + 1$$
$$= x^5 + 1$$

False.