

**Exercise 86**

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

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

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**Solution**

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

$$\begin{aligned}(f \circ g)(x) &= f(g(x)) \\ &= (x + 1)^5\end{aligned}$$

True.