Exercise 64

For the following exercises, use the function values for f and g shown in Table 3 to evaluate each expression.

x	$f(x)$	$g(x)$
0	7	9
1	6	5
2	5	6
3	8	2
4	4	1
5	0	8
6	2	7
7	1	3
8	9	4
9	3	0

Table 3

$$g(g(2))$$

Solution

Notice from the table that $g(2) = 6$ and $g(6) = 7$. Therefore,

$$g(g(2)) = g(6) = 7.$$