## Exercise 65

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

$$
g(g(6))
$$

## Solution

Notice from the table that $g(6)=7$ and $g(7)=3$. Therefore,

$$
g(g(6))=g(7)=3 .
$$

