Find the functional value $g(-1), g(0), g(4)$ for the compound function

$$g(x) = \begin{cases} 7, & x \leq 0 \\ \dfrac{1}{x}, & x \geq 0 \end{cases}$$

Solution

$x = -1$ => $g(x) = 7$ => $g(-1) = 7$

$x = 0$ => $g(x) = 7$ => $g(0) = 7$

$x = 4$ => $g(x) = \frac{1}{x}$ => $g(4) = \frac{1}{4}$

Answer: $g(-1) = 7,$ $g(0) = 7,$ $g(4) = \frac{1}{4}.$