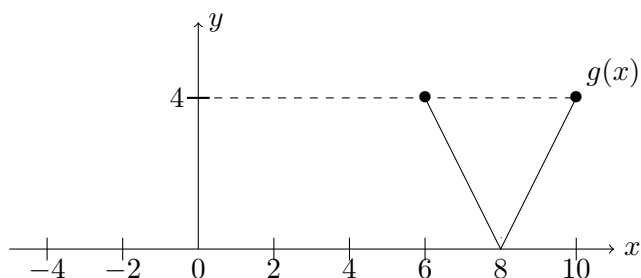


2. [12 points] A table for the function $f(x)$ and part of the graph of the piecewise-linear function $g(x)$ are given below. The following are true:

- $f(x)$ and $g(x)$ are both defined on $(-\infty, +\infty)$.
- f is an odd function.
- g is a periodic function with period 4.

x	-2	-1	0	2	3
$f(x)$	4	2	a	b	7



a. [3 points] Find the values of a and b .

b. [3 points] Find a formula for $g(x)$ for x in $[2, 4]$.

$$g(x) = \text{_____} \text{ for } x \text{ in } [2, 4].$$

c. [6 points] Compare the following values by writing one of the symbols: “ $<$ ”, “ $>$ ” or “ $=$ ” in the blank. If the relationship cannot be determined using the information given, write “N” in the blank.

i. [2 points] $g(f(-1))$ _____ $g(f(1))$

ii. [2 points] $g(14)$ _____ $g(5)$

iii. [2 points] $f(g(3))$ _____ $f(g(-3))$