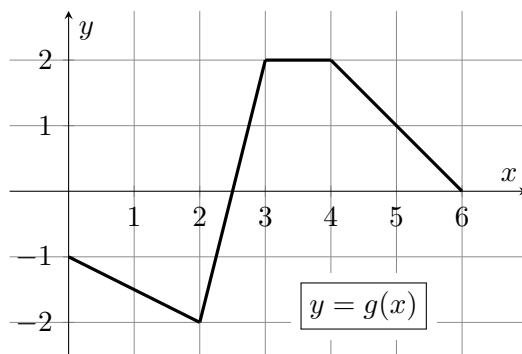


2. [10 points] An **even** function $g(x)$, which is defined for all real numbers, is graphed on the interval $[0, 6]$ below. Note that $g(x)$ is piecewise linear.



- a. [4 points] The function $g(x)$ has a continuous antiderivative, $G(x)$, which satisfies $G(2) = -2$. Complete the following table of values for $G(x)$.

x	-2	0	2	4	6
$G(x)$	4	1	-2	0	2

- b. [6 points] Sketch a graph of $G(x)$ on the interval $[-2, 6]$ using the axes provided. Make sure to clearly label the values at the points in your table above and also make it clear where $G(x)$ is increasing or decreasing, and where $G(x)$ is concave up, concave down, or linear.

