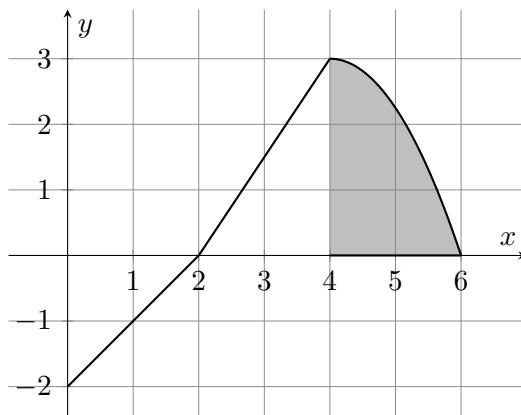


2. [14 points] An **even** function $h(x)$, which is defined for all real numbers, is graphed on the interval $[0, 6]$ below. Note that $h(x)$ is linear on the intervals $(0, 2)$ and $(2, 4)$, and that the shaded region has area 4.



- a. [4 points] The function $h(x)$ has a continuous antiderivative, $H(x)$, which satisfies $H(2) = -3$. Complete the following table of values for $H(x)$.

x	-2	0	2	4	6
$H(x)$	1	-1	-3	0	4

- b. [10 points] Sketch a graph of $H(x)$ on the interval $[-2, 6]$ using the axes provided. Make sure to clearly label the values at the points in the table above and also make it clear where $H(x)$ is increasing or decreasing, and where $H(x)$ is concave up, concave down, or linear.

