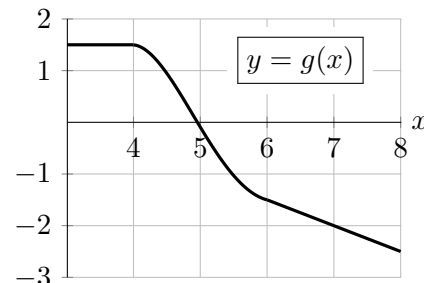


2. [12 points] On the axes provided below, sketch the graph of a single function $h(x)$ that satisfies all of the following conditions.

- The domain of the function $h(x)$ includes $-8 < x < 8$.
- $h(x)$ is concave up and decreasing on $-8 < x < -5$.
- $\lim_{x \rightarrow -5^-} h(x) = 1$ and $\lim_{x \rightarrow -5^+} h(x) = 1$.
- $h(x)$ is not continuous at -5 .
- $\frac{h(-4) - h(-2)}{-4 - (-2)} = 1$.
- $h(x)$ has a y -intercept of -3 .
- $h(x) = h(-x)$ for $-2 \leq x \leq 2$.
- On the interval $3 < x < 8$, the function $h(x)$ is the derivative of the function $g(x)$, which is shown in the graph to the right.



Solution: One possible solution is shown below.

