2. [15 points] The function $g(x)$ is graphed below. The area of the shaded region is 5.5. The function $g(x)$ is piecewise linear for $x>-1$.


On the axes provided below, sketch a continuous antiderivative $G(x)$ of $g(x)$ with domain $[-6,6]$, satisfying $G(1)=1$. Make sure to clearly label the input and output values at $x=-6,-1,2,4$, and 6 . Be sure to make it clear where $G(x)$ is concave up, concave down, or linear, and where it is increasing, decreasing, or not differentiable.


