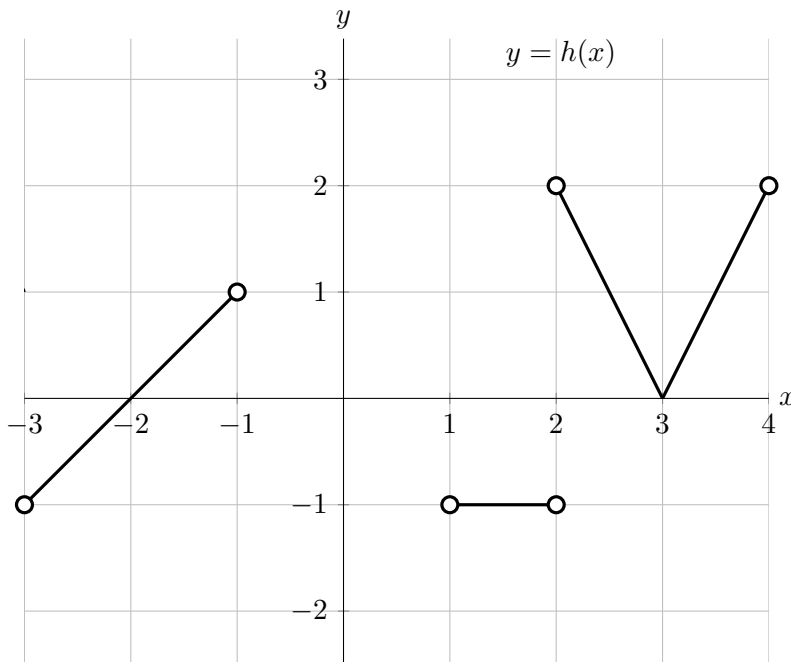
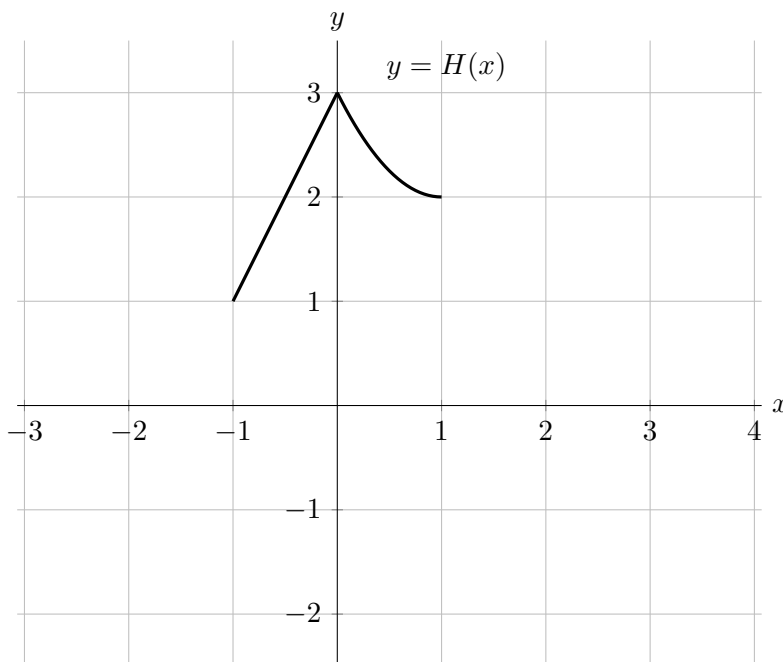


6. [11 points] Suppose $h(x)$ is a function and $H(x)$ is an antiderivative of $h(x)$ such that $H(x)$ is defined and continuous on the entire interval $-3 \leq x \leq 4$. Portions of the graphs of $h(x)$ and $H(x)$ are shown below.



- a. [4 points] Use the portions of the graphs shown to fill in the exact values of $H(x)$ in the table below.

| | | | | | |
|--------|----|----|---|---|---|
| x | -3 | -2 | 1 | 2 | 4 |
| $H(x)$ | | | 2 | | |



- b. [7 points] Use the axes above to sketch the missing portions of the graphs of both h and H over the interval $-3 \leq x \leq 4$.

Be sure that you pay close attention to each of the following:

- the values of $H(x)$ you found in part (a) above
- where H is/is not differentiable
- where H and h are increasing, decreasing, or constant
- the concavity of the graph of $y = H(x)$