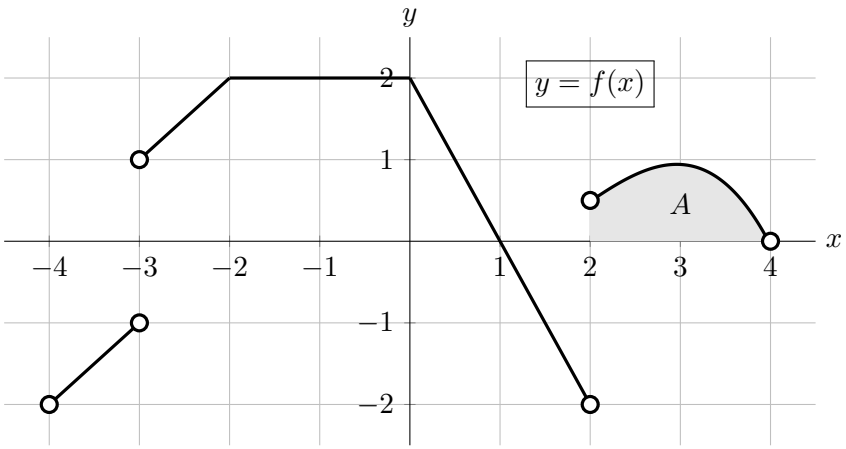
4. [10 points] The entire graph of the function $f(x)$ is given below. Note that $f(x)$ is piecewise linear on $(-4, 2)$, and the area of the shaded region A is 1.5.



a. [2 points] Let $F(x)$ be the continuous antiderivative of $f(x)$ passing through $(2, 1)$. Circle all of the x-coordinates listed below at which $F(x)$ appears to have an inflection point.

$x = -3$

$x = 1$

$x = 2$

$x = 3$

NONE OF THESE

b. [8 points] On the axes to the right, sketch a graph of the function $G(x)$, where $G(x)$ is a continuous antiderivative of $f(x)$ on $(-4, 4)$ and on the interval $(-3, 2)$, $G(x)$ is given by

$$G(x) = \int_{-1}^{x} f(t)\, dt.$$

Make sure that local extrema and concavity are clear. If there are features that are difficult for you to draw, indicate these on your graph.