4. [12 points] The graph of a function $f(x)$ is shown below. The area of shaded region $A$ is 3.1 and the area of shaded region $B$ is 2.2 . On the axes provided, sketch a well-labeled graph of an antiderivative $F(x)$ of $f(x)$ satisfying $F(0)=-1$. Indicate the $x$ - and $y$-coordinates of all critical points and inflection points of $F(x)$ in the space provided.



Coordinates of critical points: $\qquad$

Coordinates of inflection points: $\qquad$

