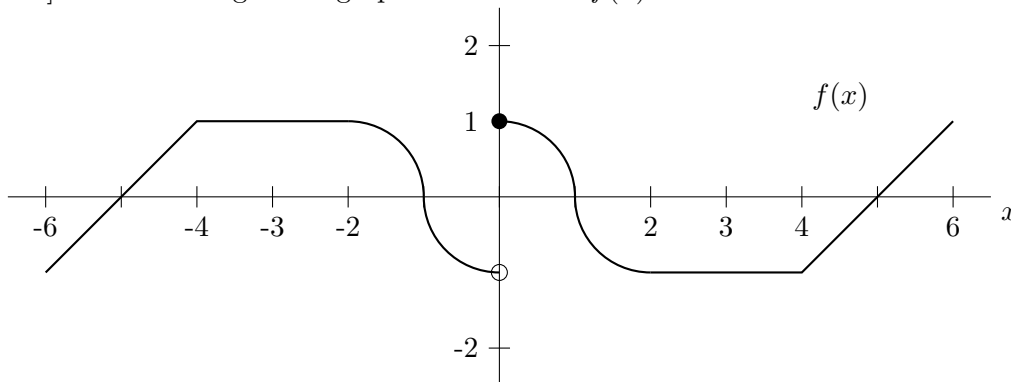


2. [12 points] The following is the graph of a function $f(x)$.



Note that the graph of $f(x)$ is a quarter of a circle on each of the intervals $[-2, -1]$, $[-1, 0]$, $[0, 1]$, $[1, 2]$ and linear on each of the intervals $[-6, -4]$, $[-4, -2]$, $[2, 4]$, $[4, 6]$.

Let $F(x)$ be a function satisfying:

- $F(0) = 0$.
- $F'(x) = f(x)$ for $-6 < x < 0$ and $0 < x < 6$.

Carefully **sketch** a graph of $F(x)$ using the axes provided below. If there are features of $F(x)$ that are difficult for you to draw, indicate these on your graph. **Label** the x - and y -coordinates of the points on your graph of F at $x = -3$, $x = 1$ and $x = 5$.

