8. [11 points] On the axes provided below, sketch the graph of a single function $y = f(x)$ satisfying all of the following conditions:

- The domain of $f(x)$ is the interval $-8 < x \leq 6$.
- $f(x)$ is continuous for all x in the interval $-8 < x < -2$.
- $f'(-7) = 0$.
- $f(x)$ is decreasing and concave up for all x in the interval $-6 < x < -4$.
- The average rate of change of $f(x)$ is equal to 0.5 between $x = -5$ and $x = -2$.
- $f(0) = 2$ and $f'(0) = -1$.
- $\lim_{x \to 2^-} f(x) = f(2)$ and $\lim_{x \to 2^+} f(x) < \lim_{x \to 2^-} f(x)$.
- $f(x)$ has constant rate of change on the interval $3 \leq x \leq 6$.

Make sure that your graph is large and unambiguous.