4. (7 points) On the axes below, sketch a graph of a single function, g, with all of the following properties.

   - $g(-2) = 0$
   - $g'(x) = -1$ for $x < -2$
   - $\lim_{x \to -2^-} g(x) = \lim_{x \to -2^+} g(x)$
   - $g''(x) > 0$ for $-2 < x < 0$
   - $g'(1) = 0$
   - $\lim_{x \to 3^-} g(x) = -4$
   - $g(x) = 2$ for $x \geq 3$

Note: Answers are not unique. One example of a graph which has the given properties is below.