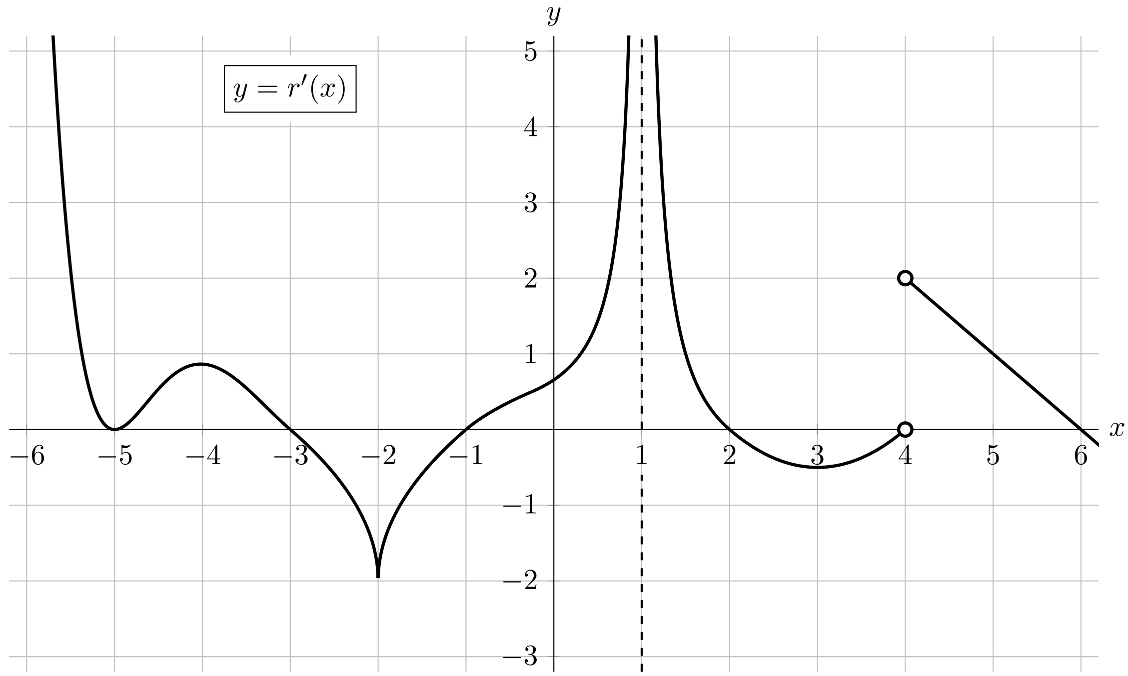
2. [10 points] Suppose $r(x)$ is a continuous function, defined for all real numbers. A portion of the graph of $r'(x)$, the **derivative** of $r(x)$, is given below. Note that $r'(x)$ has a vertical asymptote at $x = 1$ and a sharp corner at $x = -2$, and is undefined only at $x = 1$ and $x = 4$.



a. [2 points] Circle all points below that are critical points of $r(x)$.

$\boxed{x = -5}$ $\boxed{x = -3}$ $x = -2$ $\boxed{x = 1}$ $x = 3$ NONE OF THESE

b. [2 points] Circle all points below that are local maxima of $r(x)$.

$x = -5$ $\boxed{x = -3}$ $x = -1$ $x = 1$ $x = 4$ NONE OF THESE

c. [2 points] Circle all points below that are local minima of $r(x)$.

$x = -5$ $x = -3$ $\boxed{x = -1}$ $x = 1$ $\boxed{x = 4}$ NONE OF THESE

d. [2 points] Circle all points below that are inflection points of $r(x)$.

$\boxed{x = -5}$ $\boxed{x = -4}$ $\boxed{x = -2}$ $x = 2$ $\boxed{x = 4}$ NONE OF THESE

e. [2 points] Circle all intervals below on which $r'(x)$ satisfies the hypotheses of the Mean Value Theorem.

$\boxed{[-5, -3]}$ $[-3, -1]$ $\boxed{[-2, 0]}$ $[0, 2]$ $[2, 4]$ NONE OF THESE