7. [12 points] For each of the descriptions of a function $f$ that follow, indicate which of the graphs below match the description. For each description there may be no, one, or several graphs that match; write none if no graphs match the description. You may need to use a graph more than once. In each case you should assume that $f$ is defined only on the domain $[0, 2]$.

- $f''(x) < 0$ for $x < 1$ and $f''(x) > 0$ for $x > 1$; $f'(x) < 0$ for $x < 1$ and $f'(x) > 0$ for $x > 1$; and $f(x)$ is continuous everywhere except at $x = 1$.

matching graph(s): ______________

- $f''(x) > 0$ for all $x \neq 1$; $f(x) < 0$ for all $x \neq 1$; and $f(x)$ is differentiable everywhere except at $x = 1$.

matching graph(s): ______________

- $f''(x) < 0$ for all $x \neq 1$; $f'(x) < 0$ for $x < 1$ and $f'(x) > 0$ for $x > 1$; and $f(x) < 0$ for all $x \neq 1$.

matching graph(s): ______________

- $f''(x) < 0$ for $x < 1$ and $f''(x) > 0$ for $x > 1$; $f'(x) < 0$ for $x < 1$ and $f'(x) > 0$ for $x > 1$; and $f(x)$ is differentiable everywhere except at $x = 1$.

matching graph(s): ______________