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 \textbf{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 \([0, 2]\).

\begin{itemize}
  \item \( f''(x) < 0 \) 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 \( x = 1 \).
    \begin{itemize}
      \item matching graph(s): \( A \)
    \end{itemize}
  \item \( f''(x) > 0 \) for all \( x \neq 1 \); \( f(x) < 0 \) for all \( x \neq 1 \); and \( f(x) \) is differentiable everywhere except at \( x = 1 \).
    \begin{itemize}
      \item matching graph(s): \( C, E \)
    \end{itemize}
  \item \( f''(x) < 0 \) for all \( x \neq 1 \); \( f'(x) < 0 \) for \( x < 1 \) and \( f'(x) > 0 \) for \( x > 1 \); and \( f(x) < 0 \) for all \( x \neq 1 \).
    \begin{itemize}
      \item matching graph(s): \textbf{none}
    \end{itemize}
  \item \( f''(x) < 0 \) 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 \( x = 1 \).
    \begin{itemize}
      \item matching graph(s): \( A, D \)
    \end{itemize}
\end{itemize}