Find the following three limits.

a) One limit must be solved using L’Hopital’s Rule. Find it that way.

b) One limit can be found using either L’Hopital’s Rule or by using Ch. 2 methods. Find it both ways.

c) One limit cannot be found using L’Hopital’s Rule. Find it it some other way.

I’ll leave it to you to figure out which numbered limit goes with which lettered question.

Note: Your solutions to parts (a),(b),(c) should be written by different people in your group.

\[
\begin{align*}
[1] \lim_{x \to 2} \frac{x^2 + x - 6}{x - 2} & \quad [2] \lim_{x \to 0} \frac{e^{(3x)} - 1}{\sin(x)} & \quad [3] \lim_{x \to 0^+} \frac{\ln(x)}{x}
\end{align*}
\]