

$$\begin{aligned}\lim_{x \rightarrow 1-0} \frac{x+2}{2x^2-3x+1} &= \lim_{x \rightarrow 1-0} \frac{x+2}{(2x-1)(x-1)} = \left(\lim_{x \rightarrow 1-0} \frac{x+2}{2x-1} \right) \left(\lim_{x \rightarrow 1-0} \frac{1}{x-1} \right) = \\ &= \left(\frac{1+2}{2-1} \right) \left(\lim_{x \rightarrow 1-0} \frac{1}{x-1} \right) = 3 \left(\lim_{x \rightarrow 1-0} \frac{1}{x-1} \right) = 3(-\infty) = -\infty\end{aligned}$$