

## ESAME 30/01/2023

$$\lim_{x \to \frac{3}{8}^{-}} \frac{8}{(8x-3)^3} = -\infty$$

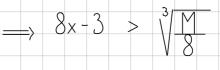
$$\forall M < 0 \qquad \exists \delta_m > 0$$

Usiamo 3 - 5m =

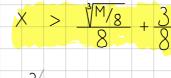
$$\frac{3}{8} - \frac{1}{8} < x < \frac{3}{8} =$$



$$\longrightarrow \frac{8}{M} < (8x - 3)^3$$













































ESAME 09/06/2022  $\lim_{x \to -\infty} \frac{-3x+1}{2x+3} = -\frac{3}{2}$ 

$$\begin{array}{c} x \rightarrow -\infty & 2x + 3 & 2 \\ \hline \forall \ \varepsilon > 0 & \exists \ M < 0 \\ \hline \times < M) \implies \begin{vmatrix} -3x + 1 \\ 2x + 3 \end{vmatrix} + \frac{3}{2} \begin{vmatrix} < \varepsilon \\ \\ \end{vmatrix} < \varepsilon \\ \hline \Rightarrow & \begin{vmatrix} 11 \\ 2(2x + 3) \end{vmatrix} < \varepsilon \\ \hline \Rightarrow & \begin{vmatrix} 12x + 31 \\ 2\varepsilon \end{vmatrix} > \frac{11}{2x + 3} \\ \hline \Rightarrow & 2x + 3 \end{vmatrix} > \frac{11}{2\varepsilon} \\ \hline \Rightarrow & 2x + 3 < -\frac{11}{2\varepsilon} & \sqrt{2x + 3} > \frac{11}{2\varepsilon} \\ \hline \Rightarrow & 2x < -\frac{11}{2\varepsilon} & -3 & \sqrt{2x} > \frac{11}{2\varepsilon} & -3 \\ \hline \Rightarrow & x < -\frac{11}{4\varepsilon} & -\frac{3}{2} & \sqrt{x} > \frac{11}{4\varepsilon} & -\frac{3}{2} \\ \hline \end{array}$$