

$$\lim_{x \rightarrow 2} \frac{x^3 - x^2 - 4x + 4}{x^2 - x - 2} = \frac{(2)^3 - (2)^2 - 4(2) + 4}{(2)^2 - (2) - 2} = \frac{0}{0} \text{ (IND)}$$

FACTORIZAR:

$$\begin{array}{r|rrrr} & 1 & -1 & -4 & 4 \\ 2 & & 2 & 2 & -4 \\ \hline & 1 & 1 & -2 & 0 \\ 2 & & 2 & 6 & \\ \hline & 1 & 3 & 4 & \end{array}$$

$$\begin{array}{r|rrr} & 1 & -1 & -2 \\ 2 & & 2 & 2 \\ \hline & 1 & 1 & 0 \\ 2 & & 2 & \\ \hline & 1 & 3 & \end{array}$$

$$\lim_{x \rightarrow 2} \frac{\cancel{(x-2)}(x^2+x-2)}{\cancel{(x-2)}(x+1)} = \frac{(2)^2+(2)-2}{2+1} = \boxed{\frac{4}{3}}$$