

LIMITES LATERAIS e INFINITOS



$$h) \lim_{x \rightarrow -\infty} \frac{2x^4 + 4}{3 - x}$$

Annotations: $2x^4 + 4 \rightarrow +\infty$, $3 - x \rightarrow +\infty$, $2x^4 \rightarrow +\infty$, $3 \rightarrow +\infty$

$$= \lim_{x \rightarrow -\infty} \frac{x^3 \left(2 + \frac{4}{x^4}\right)}{x \left(\frac{3}{x} - 1\right)}$$

Annotations: x^3 (orange), x (orange), $-\infty$ (purple), $2 + 0$ (red), $0 - 1$ (green), -1 (red)

$$= \lim_{x \rightarrow -\infty} \frac{x^3 \cdot \left(2 + \frac{4}{x^4}\right)}{\frac{3}{x} - 1} = \boxed{+\infty}$$

$\frac{\infty}{\infty} \rightarrow$ indeterminado

$\frac{\infty}{\infty} \rightarrow 0$

$\boxed{+\infty}$