

LIMITES LATERAIS e INFINITOS



$$m) \lim_{x \rightarrow -\infty} \frac{2x^2 - 3x + 1}{10x^2 - 3} =$$

Annotations: $2x^2 \rightarrow +\infty$, $-3x \rightarrow +\infty$, $+1 \rightarrow +1$, $10x^2 \rightarrow +\infty$, $-3 \rightarrow -3$

$$\frac{8}{8} \rightarrow \text{indet.}$$

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

$$= \lim_{x \rightarrow -\infty} \frac{x^2 \left(2 - \frac{3}{x} + \frac{1}{x^2} \right)}{x^2 \left(10 - \frac{3}{x^2} \right)} = \frac{2}{10} = \boxed{\frac{1}{5}}$$

Annotations: x^2 cancels out. $2 \rightarrow 2$, $10 \rightarrow 10$, $-\frac{3}{x} \rightarrow 0$, $-\frac{3}{x^2} \rightarrow 0$