

Calculer :

$$\lim_{x \rightarrow +\infty} \frac{e^{2x}}{x}$$

Calculer :

$$\lim_{x \rightarrow -\infty} x \cdot e^{3x}$$

Calculer :

$$\lim_{x \rightarrow +\infty} (x^2 - 1) \cdot e^{-x}$$

Calculer :

$$\lim_{x \rightarrow -\infty} (2x + 1) \cdot e^x$$

Calculer :

$$\lim_{x \rightarrow +\infty} \frac{x + 3}{e^{2x}}$$

Calculer :

$$\lim_{x \rightarrow -\infty} (2x + 3) \cdot e^{4x}$$

Calculer :

$$\lim_{x \rightarrow +\infty} \frac{2e^{3x}}{x + 1}$$

Calculer :

$$\lim_{x \rightarrow -\infty} (x^2 - 1) \cdot e^{3x}$$

Calculer :

$$\lim_{x \rightarrow +\infty} \frac{e^x + 1}{x}$$

Calculer :

$$\lim_{x \rightarrow -\infty} \left(x - \frac{2}{x}\right) \cdot e^{2x}$$

Calculer :

$$\lim_{x \rightarrow +\infty} \frac{2x + 3}{e^x}$$

Calculer :

$$\lim_{x \rightarrow -\infty} (3x - 2) \cdot e^{4x}$$

$$x \cdot e^{3x} = \frac{1}{3} \times (3x) \cdot e^{3x}$$

$$\lim_{x \rightarrow -\infty} x \cdot e^{3x} = \frac{1}{3} \times 0 = 0 \text{ (TCC)}$$

$$\frac{e^{2x}}{x} = \frac{e^{(2x)}}{(2x)} \times 2$$

$$\lim_{x \rightarrow +\infty} \frac{e^{2x}}{x} = +\infty \text{ (TCC)}$$

$$(2x + 1) \cdot e^x = 2 \times x \cdot e^x + e^x$$

$$\lim_{x \rightarrow -\infty} (2x + 1) \cdot e^x = 2 \times 0 + 0 = 0$$

(TCC)

$$(x^2 - 1) \cdot e^{-x} = \frac{x^2}{e^x} - \frac{1}{e^x}$$

$$\lim_{x \rightarrow +\infty} (x^2 - 1) \cdot e^{-x} = 0 - 0 = 0$$

(TCC)

$$(2x + 3) \cdot e^{4x} = \frac{(4x) \cdot e^{(4x)}}{2} + 3e^{4x}$$

$$\lim_{x \rightarrow -\infty} (2x + 3) \cdot e^{4x} = \frac{0}{2} + 3 \times 0 = 0$$

(TCC)

$$\frac{x + 3}{e^{2x}} = \frac{1}{2} \times \frac{(2x)}{e^{(2x)}} + \frac{3}{e^{2x}}$$

$$\lim_{x \rightarrow +\infty} \frac{x+3}{e^{2x}} = \frac{1}{2} \times 0 + 0 = 0 \text{ (TCC)}$$

$$(x^2 - 1) \cdot e^{3x} = \frac{1}{9} (3x)^2 \cdot e^{(3x)} - e^{3x}$$

$$\lim_{x \rightarrow -\infty} (x^2 - 1) \cdot e^{3x} = \frac{1}{9} \times 0 - 0 = 0$$

(TCC)

$$\frac{2e^{3x}}{x + 1} = \frac{e^{(3x)}}{(3x)} \times \frac{6}{1 + \frac{1}{x}}$$

$$\lim_{x \rightarrow +\infty} \frac{2e^{3x}}{x+1} = +\infty \text{ (TCC)}$$

$$\left(x - \frac{2}{x}\right) \cdot e^{2x} = \frac{(2x) \cdot e^{(2x)}}{2} - \frac{2e^{2x}}{x}$$

$$\lim_{x \rightarrow -\infty} \left(x - \frac{2}{x}\right) \cdot e^{2x} = \frac{0}{2} - 0 = 0$$

(TCC)

$$\frac{e^x + 1}{x} = \frac{e^x}{x} + \frac{1}{x}$$

$$\lim_{x \rightarrow +\infty} \frac{e^x+1}{x} = +\infty \text{ (TCC)}$$

$$(3x - 2) \cdot e^{4x} = \frac{3((4x) \cdot e^{4x})}{4} - 2e^{4x}$$

$$\lim_{x \rightarrow -\infty} (3x - 2) \cdot e^{4x} = \frac{3 \times 0}{4} - 0 = 0$$

(TCC)

$$\frac{2x + 3}{e^x} = \frac{2x}{e^x} + \frac{3}{e^x}$$

$$\lim_{x \rightarrow +\infty} \frac{2x+3}{e^x} = 0 + 0 = 0 \text{ (TCC)}$$

