

DIM. LAGR.

(4)

$$F: x \in [a, b] \rightarrow F(x) = f(x)(b-a) - x(f(b) - f(a))$$

$$\left. \begin{array}{l} 1) F(x) \text{ CONT. } [a, b] \\ 2) F(x) \text{ DER. } ]a, b[ \\ 3) F(a) = F(b) \end{array} \right] \Rightarrow \left[ \begin{array}{l} \exists c \in ]a, b[ : \\ F'(c) = 0 \end{array} \right]$$

$$\begin{aligned} F(a) &= f(a)(b-a) - a(f(b) - f(a)) = \\ &= f(a)b - a f(b) \end{aligned}$$

$$\begin{aligned} F(b) &= f(b)(b-a) - b(f(b) - f(a)) = \\ &= -a f(b) + b f(a) \end{aligned}$$