

$$C'(x) = x^{-2\alpha-1} e^{\frac{1}{x^2}} \sin x^{\frac{1}{2}} \quad \text{où } \alpha \geq 0, \alpha \in \mathbb{C}$$

Posons $u = x^{-2} \Rightarrow dx = -\frac{1}{2} u^{\frac{3}{2}} du$

$$dc = \frac{-1}{2} u^{\alpha-1} e^u \sin u^{\frac{-1}{4}} du$$