

Esercizi

domenica 12 giugno 2022 21:50

1) $f(x) = x \cos x^2$

Primitive

$$\int x \cos x^2$$

$$t = x^2$$

$$dt = 2x dx$$

$$\frac{1}{2} \int \cos t = \frac{1}{2} \sin t \rightarrow \frac{\sin x^2}{2} + c$$

$$\alpha(0) = 0$$

$$\sin 0 + c = 0$$

$$c = 0$$

$$\rightarrow \frac{\sin x^2}{2} + 0$$

$$\left[\frac{\sin x^2}{2} \right]_0^{\sqrt{\frac{\pi}{2}}} = \frac{1}{2}$$