Karla Mariela Palax Tuy 2290-24-14588

Parcial Corto

1. $F(x) = 10x * e^x =$

$f'(x) = (10x)e^x + 10(ex)$

$f(x) = 10e^x + 10xe^x$

R// $F(x) = 10e^x + 10xe^x$

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

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

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

R// $f(x) = \frac{e^x(x-2)}{x^3}$

3. $F(x) = \frac{5x^3 * \sin x}{\sqrt{x}}$

$f(x) = \frac{5x^3 \sin x}{x^{1/2}} = 5x^{3-1/2} \sin x = 5x^{5/2} \sin x$

$5 * \frac{5}{2} x^{(5/2)-1} = \frac{25}{2} x^{3/2}$

$f(x) = (\frac{25}{2} x^{3/2}) \sin x + 5x^{5/2} \cos x$

R// $F(x) = \frac{25}{2} x^{3/2} \sin x + 5x^{5/2} \cos x$