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Nombre del profesor: Jorge Enrique Albores

Nombre del trabajo: Integrales

Materia: Matemáticas aplicadas

Grado: 6to cuatrimestre

Grupo: Técnico en administración de recursos humanos

NORMA UJIAN KORKURS GAMING

1 $\int e^x dx = e^x + C$

2 $\int e^{5x^2+11x} dx$ $F = 5x^2+11$ $F' = 20x$
 $\frac{1}{10} \int e^{5x^2+11x} dx$

3 $\int a^{10+2x} dx$ $F = 10a^x + 2$ $F' = 20a^x$
 $\frac{3}{20} \frac{a^{10+2x}}{\ln a} + C$

4 $\int e^{\sqrt{x}} \frac{1}{\sqrt{x}} dx$ $F = \sqrt{x}$ $F' = \frac{1}{2} x^{-1/2} = \frac{1}{2\sqrt{x}}$
 $= 2\sqrt{x} = 2 \int e^{\sqrt{x}} \frac{1}{\sqrt{x}} dx$

5 $\int \frac{10x^4}{12x^3+3} dx$ $F = 12x^3+3$ $F' = 36x^2$
 $\frac{10}{36} \int \frac{x^4}{12x^3+3} dx = \frac{10}{36} \ln |12x^3+3| + C$

6 $\int 10 \cdot 4x^{11} \cdot x^2 dx$ $F = 4x^{12} + 17$ $F' = 12x^{11}$
 $\frac{1}{12} \cdot \frac{10 \cdot 4x^{12} + 17x^2 + C}{\ln 10}$

7 $\int e^{4x^2+2x} dx$ $F = 4x^2+2$ $F' = 8x$
 $\frac{3}{8} \int e^{4x^2+2x} dx = \frac{3}{8} e^{4x^2+2x} + C$

8 $\int 15^{x^2-3} \cdot 2x dx$ $F = 15x^{2-3}$ $F' = 30x$
 $\frac{1}{30} \int 15^{x^2-3} \cdot 2x dx = \frac{1}{30} \cdot \frac{15^{x^2-3} \cdot 2x + C}{\ln 10}$

9 $\int e^{x^2+2} \cdot 2x dx$ $F = x^2+2$ $F' = 2x$
 $\frac{1}{2} e^{x^2+2} + C$

10 $\int \frac{3x^2}{2x^6-10} dx$ $F = 2x^6-10$ $F' = 12x^5$

$\frac{3}{12} \int \frac{x^2}{2x^6-10} dx = \frac{3}{12} \ln |2x^6-10| + C$

10 $\int 3x^{11} dx$ $F = 3x^{11}$ $F' = 6x$

$\frac{1}{6} \int 3x^{11} dx = \frac{1}{6} \cdot \frac{3x^{11} + C}{11}$

12 $\int e^{4x+10+2x} dx$ $F = 4x+10+2x$ $F' = 40x$

$\frac{1}{40} \int e^{4x+10+2x} dx = \frac{1}{40} e^{4x+10+2x} + C$

13 $\int \frac{8x^2}{3x^6+1} dx$ $F = 3x^6+1$ $F' = 18x^5$

$\frac{8}{18} \int \frac{8x^2}{3x^6+1} dx = \frac{8}{18} \ln |3x^6+1| + C$

14 $\int 4^3 x^4 + 1x^3 dx$ $F = 3x^{4+1}$ $F' = 6x$

$\frac{1}{6} \int 4^3 x^4 + 1x^3 dx = \frac{1}{6} (4x^5 + 1x^4) + C$

15 $\int e^{x^2} \cdot x dx$ $F = x^2$ $F' = 2x$

$\frac{1}{2} \int e^{x^2} \cdot x dx = \frac{1}{2} e^{x^2} + C$

16 $\int 3x^2 + 1 \cdot 5x dx$ $F = x^3$ $F' = 2x$

$\frac{1}{2} \int 3x^2 + 1 \cdot 5x dx = \frac{1}{2} \frac{3x^3+5x^2}{3} + C$

Profe hay me ayuda porfa de verdad en esta materia y en dibujo porfa profe se lo pido de corazón