NOMBRE DEL ALUMNO: OSWALDO JAVIER LÓPEZ ÁLVAREZ

NOMBRE DEL PROFESOR: JORGE ENRIQUE

NOMBRE DEL TRABAJO: EXAMEN

MATERIA: MATEMATICAS APLICADA

GRUPO: RECURSOS HUMANOS

GRADO: 5

COMITAN DE DOMINGEZ

Oswaldo Javier López Alvarez

1. $\int \frac{12x^7}{3x^8-4}\,dx$ $\quad f = 3x^8 - 4$ $\quad f' = 24x\,dx$ $= \frac{12}{24}\left|\ln\left|2x^2-5\right|\right| + C$

2. $\int e^{3x}\,dx = f = 3x \quad f = 3 = \frac{1}{3} e^{x^3} + C$

3. $\int \frac{5x^2}{4x^3-3}\,dx$ $\quad f = 4x^3 - 3$ $\quad f\ 12x\,d$

$dx = \frac{5}{12}\ \frac{x}{4x^2-3} = \frac{5}{12}\left|\ln\left|4x^2-3\right|\right| 16$

4. $\int 2^{x^2+1} x\,dx$ $\quad f = 2x^2+1$ $\quad f = 4x$ $\quad \frac{1}{4}\int 2x^{2-1} + C = \frac{1}{4}\int 2x + C$

5. $\int 6^{x5+1} + 3x^4\,dx$ $\quad f = 6x^{5+1}$ $\quad f\ 30x$

$\frac{1}{30}\ 6x^{5+1} + 3x^4\,dx = \frac{1}{3}\ \frac{36x^2 + 3x^4 + C}{\ln}$

6. $\int e^{5x}\,dx$ $\quad f = 5x$ $\quad f' = 5$ $\quad \frac{1}{5} e^5 + C$

7. $\frac{2x^4}{x^5+1}\,dx$ $\quad f = x^5 + 1$ $\quad f' = 5\,dx$ $\quad \frac{2}{5}\left|\ln\left|x^5+1\right|\right| + C$