ESCUELA SUPERIOR POLITÉCNICA DEL LITORAL
FACULTAD DE CIENCIAS NATURALES Y MATEMÁTICAS
CÁLCULO INTEGRAL – 2DO. TÉRMINO 2014
DEBER NO. 1 – ING. LUIS ANDRÉS VARGAS

Desarrollar las siguientes Integrales

$$\int \frac{x\,dx}{\sqrt{1+x^2+\sqrt{\left(1+x^2\right)^3}}}$$

$$\int \frac{\sqrt{1+x^2}+x\sqrt{1-x^2}}{\sqrt{1-x^4}}\,dx$$

$$\int x\left(\operatorname{arctg} x\right)^2 dx$$

$$\int \frac{x-1}{\sqrt{4x^2-8x+3}}dx$$

$$\int \left(x^2-3x+2\right)e^{2x}\,dx$$

$$\int \operatorname{sen}\sqrt{x}\,dx$$

$$\int \frac{\operatorname{sen} x\cos x}{\sqrt{a^2\operatorname{sen}^2 x+b^2\cos^2 x}}\,dx$$

$$\int arc\,tan\left(\sqrt{x}\right)dx$$

$$\int \sqrt{\frac{\ln\left(x+\sqrt{1+x^2}\right)}{1+x^2}}\,dx$$

$$\int x\operatorname{sen}(3x-1)dx$$

$$\int \frac{x\cos x\,dx}{\operatorname{sen}^2 x}$$

$$\int \frac{arc\,tan\sqrt{x}}{\sqrt{x}\,(1+x)}\,dx$$

$$\int \operatorname{sen} x\ln\left(\operatorname{tg} x\right)dx$$

$$\int \frac{(1+x)^2}{1+x^2}\,dx$$

$$\int x ln^2(x)dx$$

$$\int \arcsin x\,dx$$