Universidad Politécnica de Honduras
Sede La Paz
Cálculo II

Hoja de Trabajo sobre Integral Definida

Resuelva las siguientes integrales completando los espacios correspondientes:

Ejercicio 1:

$$\int_0^3 (3x^2 - 4x + 1)dx$$

$$= \frac{3x^3}{\quad} - \frac{4x^2}{\quad} + x\Big|_0^3$$

$$= x^3 - 2x^2 + x\Big|_0^3$$

$$= \left[(\ \ )^3 - 2(\ \ )^2 + (3)\right] - \left[(0)^2 - 2(0)^2 + (0)\right]$$

$$= \left[\quad - 2(\ \ ) + 3\right]$$

$$= \quad - \quad + 3$$

$$=$$

LIVEWORKSHEETS

Ejercicio 2:

$$\int_1^4 \sqrt{x}(2+x)dx$$

$$\int_1^4 x^{1/2}(2+x)dx$$

$$\int_1^4 (2x^{1/2}+x^{3/2})dx$$

$$= \frac{4x^{3/2}}{\quad} + \frac{2x^{5/2}}{\quad} \Big|_1^4$$

$$=$$

$$= \left[\frac{(4)^{3/2}}{\quad} + \frac{(4)^{5/2}}{\quad}\right] - \left[\frac{4(1)^{3/2}}{3} + \frac{2(1)^{5/2}}{5}\right]$$

$$= \left[\frac{\quad}{3} + \frac{\quad}{5}\right] - \left[\frac{\quad}{3} + \frac{2}{\quad}\right]$$

$$= \frac{\quad}{15} - \frac{\quad}{\quad}$$

$$= \frac{\quad}{\quad}$$

LIVEWORKSHEETS