CÁLCULO II

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1 Ejercicio 6.5-Relación 6. Calcula las siguientes integrales:

ll)
$$\int_{1/4}^{3/4} \frac{arcsen(x)}{\sqrt[3]{1-x^2}} dx$$
 t=arcsen(x) dt= $1/\sqrt[3]{1-x^2} dx$ => $\int_{arcsen(1/4)}^{arcsen(3/4)} t \cdot dt dx$ = $\frac{t^2}{2} \int_{arcsen(1/4)}^{arcsen(3/4)} = \frac{arcsen^2(3/4) - arcsen^2(1/4)}{2}$

$$\text{m)} \int_0^{1/2} \frac{1}{\sqrt[3]{20+8x-x^2}} dx = \int_0^{1/2} \frac{dx}{\sqrt[3]{6^2-(x-4)^2}} = \int_0^{1/2} \frac{dx}{\sqrt[3]{1-(\frac{x-4}{6})^2}} = arcsen(\frac{x-4}{6}) \, \big]_0^{1/2} = arcsen(\frac{-7}{6}) = arcsen(\frac{-2}{3})$$