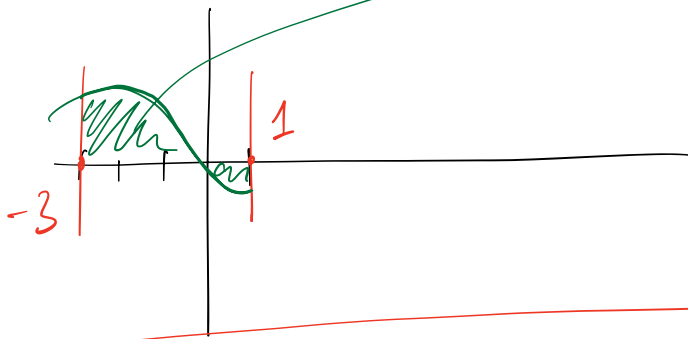


Exemple: On donne

$$\int_{-3}^1 f(x) dx = 5$$

$$\int_1^2 f(x) dx = 2$$



$$\int_0^1 f(x) dx = -1$$

$$\int_{-3}^2 f(x) dx \quad \int_2^0 f(x) dx$$

A' calculer

$$\int_a^b f(x) dx = \int_a^c f(x) dx + \int_c^b f(x) dx$$

$$\int_a^b f(x) dx = - \int_b^a f(x) dx$$

$$\int_{-3}^2 f(x) dx = \int_{-3}^1 f(x) dx + \int_1^2 f(x) dx$$

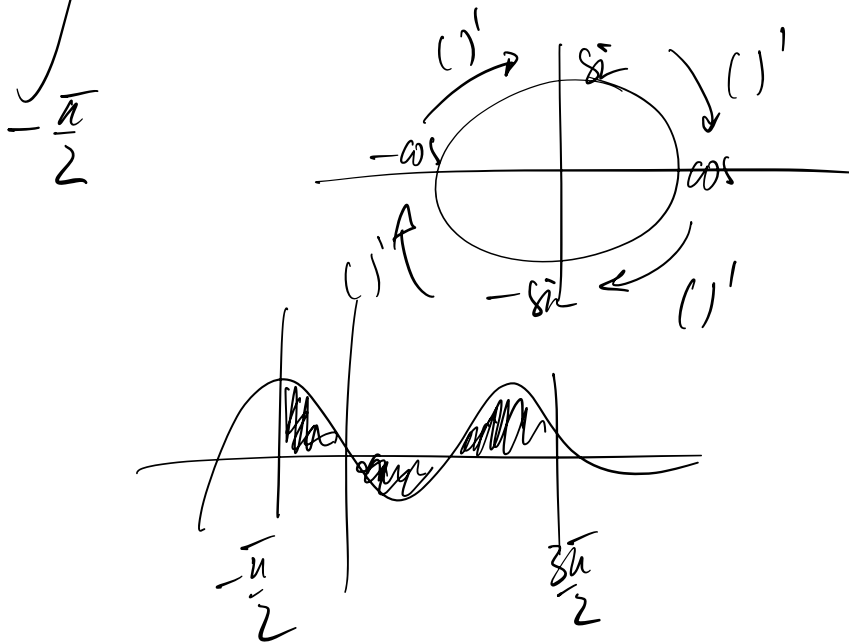
$$= 5 + 2 = 7$$

$$\int_0^2 f(x) dx = \int_0^1 f(x) dx + \int_1^2 f(x) dx$$

$$= -1 + 2 = 1$$

$$\int_2^0 f(x) dx = -1$$

$$\int_{-\frac{\pi}{2}}^{\frac{\pi}{2}} \sin^2 x \cos x \, dx = F(x)$$



$$\int \frac{4-x^2}{(4+x^2)^2} dx = \frac{x}{x^2+4} + C$$

rule (1)'

diff rule $\int$

$$\left(\frac{x}{x^2+4} \right)' = \frac{4-x^2}{(4+x^2)^2}$$

A' five