

Integration - Misc - Exercises (1 page; 7/10/18)

(1) If $\int_{-a}^a f(x) dx = b$, find $\int_{-a}^a f(-x) dx$

(2) Explain the following 'paradox':

$$\int \frac{1}{2x} dx = \frac{1}{2} \int \frac{1}{x} dx = \frac{1}{2} \ln x + C$$

but $\int \frac{1}{2x} dx = \frac{1}{2} \ln(2x) + C$ (by the reverse Chain rule)