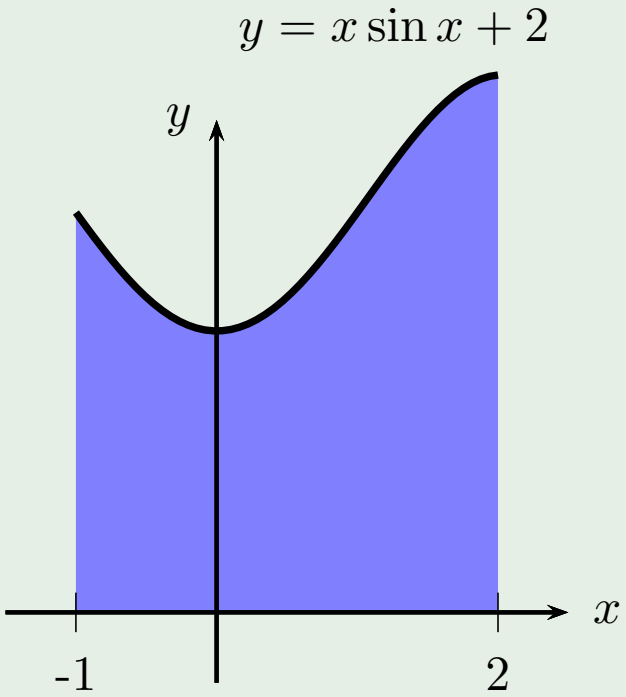
Calcul intégral

Frédéric Lancereau

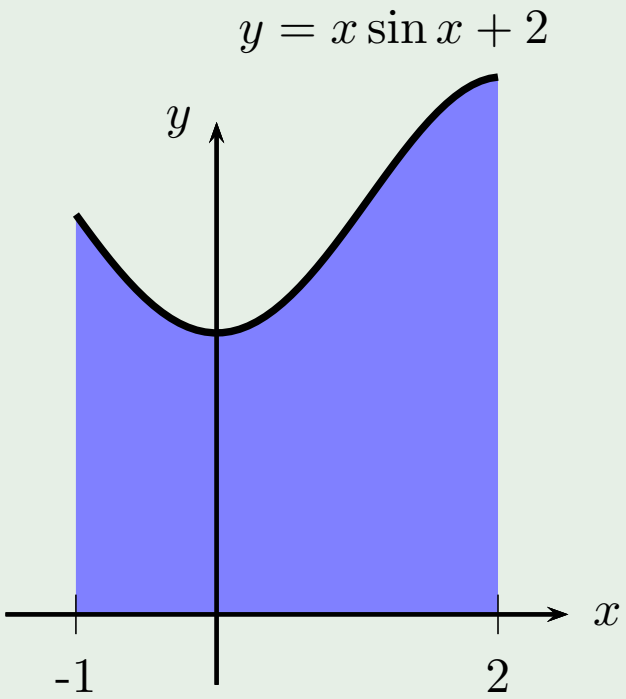
22 avril 2020

Théorème Fondamental du Calc. Diff. et Intégral !



$$\int_{-1}^{2} x \sin x + 2 \ \mathrm{d}x$$

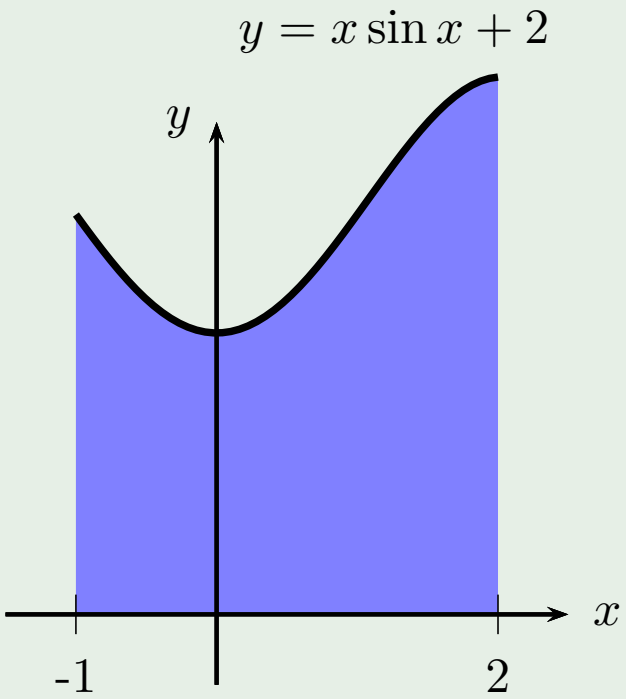
Théorème Fondamental du Calc. Diff. et Intégral !



$$\int_{-1}^{2} x \sin x + 2 \ \mathrm{d}x$$

$$= \int_{-1}^{2} x \sin(x) \ \mathrm{d}x + \int_{-1}^{2} 2 \ \mathrm{d}x$$

Théorème Fondamental du Calc. Diff. et Intégral !

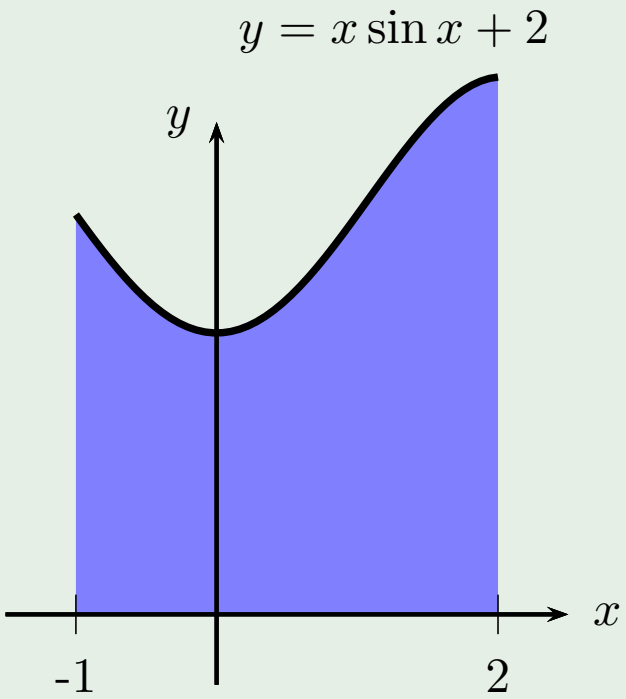


$$\int_{-1}^{2} x \sin x + 2 \ \mathrm{d}x$$

$$= \int_{-1}^{2} x \sin(x) \ \mathrm{d}x + \int_{-1}^{2} 2 \ \mathrm{d}x$$

$$= \Big[-x\cos(x) - (-\sin(x)) \Big]_{-1}^{2} + \Big[2x \Big]_{-1}^{2}$$

Théorème Fondamental du Calc. Diff. et Intégral !



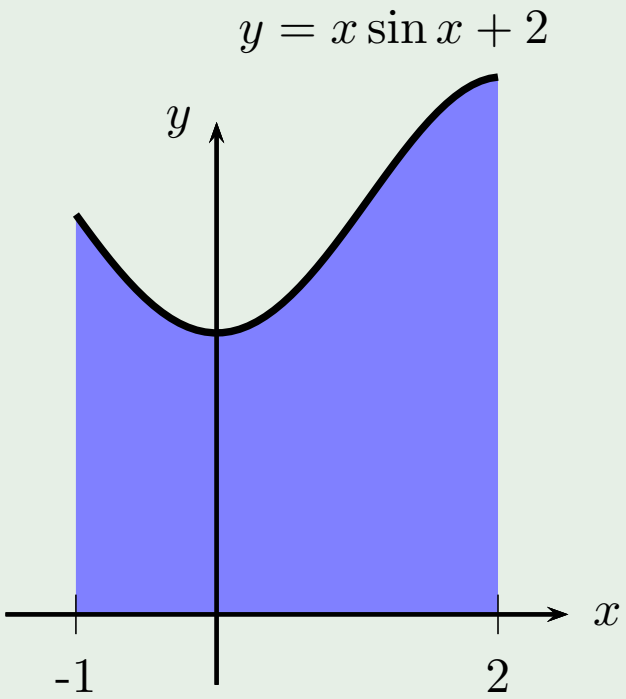
$$\int_{-1}^{2} x \sin x + 2 \ \mathrm{d}x$$

$$= \int_{-1}^{2} x \sin(x) \ \mathrm{d}x + \int_{-1}^{2} 2 \ \mathrm{d}x$$

$$= \Big[-x\cos(x) - (-\sin(x)) \Big]_{-1}^{2} + \Big[2x \Big]_{-1}^{2}$$

$$= -2\cos(2) + \sin(2) - \cos(1) + \sin(1) + 6$$

Théorème Fondamental du Calc. Diff. et Intégral !



$$\int_{-1}^{2} x \sin x + 2 \ \mathrm{d}x$$

$$= \int_{-1}^{2} x \sin(x) \ \mathrm{d}x + \int_{-1}^{2} 2 \ \mathrm{d}x$$

$$= \Big[-x\cos(x) - (-\sin(x)) \Big]_{-1}^{2} + \Big[2x \Big]_{-1}^{2}$$

$$= -2\cos(2) + \sin(2) - \cos(1) + \sin(1) + 6$$

à la calculatrice : $8{,}04275\ldots$