1 | additive

2 | change of lower bound

$$\int_{a}^{b} f(x)dx + \int_{b}^{c} f(x)dx = \int_{a}^{c} f(x)dx$$

$$\implies \int_{a}^{x} f(t)dt = \int_{b}^{x} f(t)dt - \int_{a}^{b} f(t)dt$$