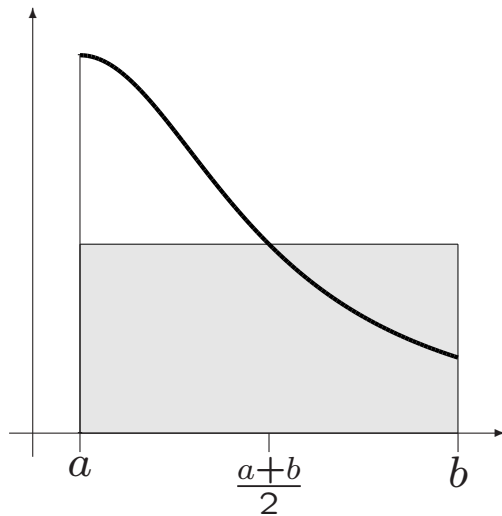


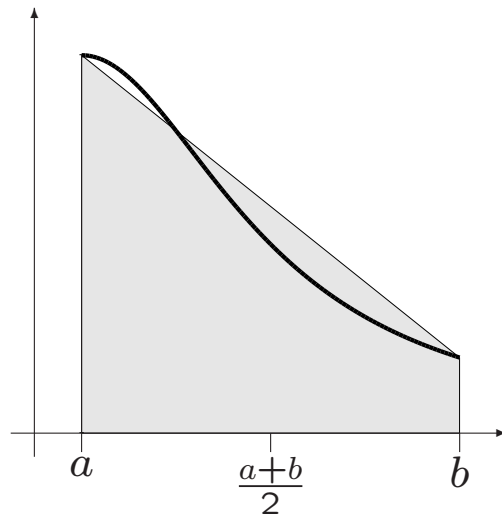
Quadraturformeln

$$\int_a^b w(x) dx \approx Q(w) = \sum_{i=1}^m \alpha_i w(x_i)$$



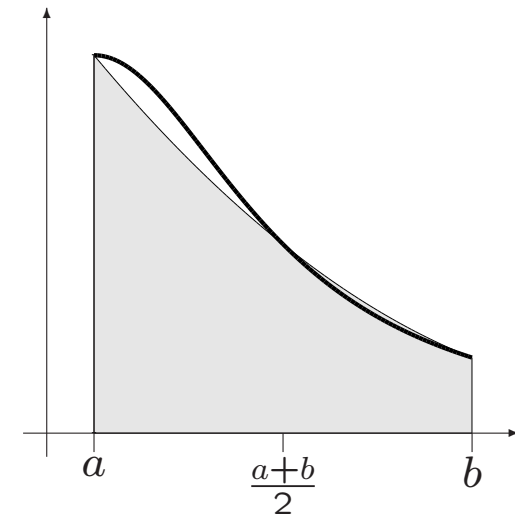
Mittelpunktsregel

$$Q_{MR} = (b-a)w\left(\frac{a+b}{2}\right)$$



Trapezregel

$$Q_{TR} = \frac{b-a}{2}(w(a) + w(b))$$



Simpsonsche Regel

$$Q_{SR} = \frac{b-a}{6}(w(a) + 4w\left(\frac{a+b}{2}\right) + w(b))$$