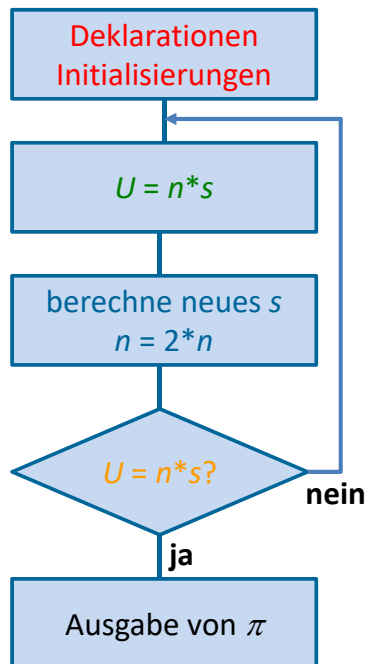
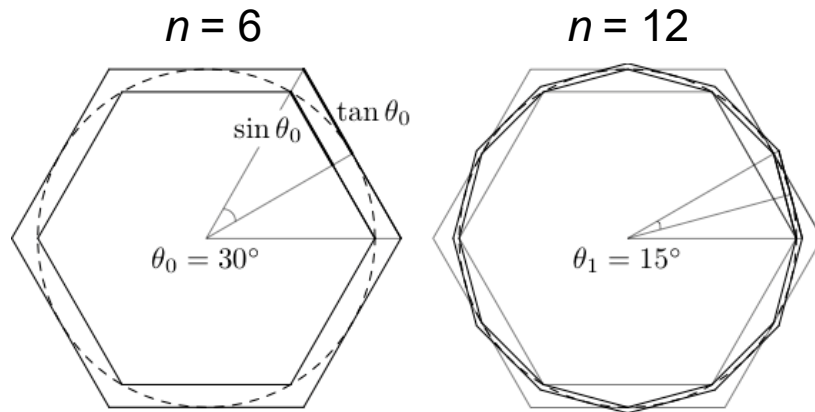


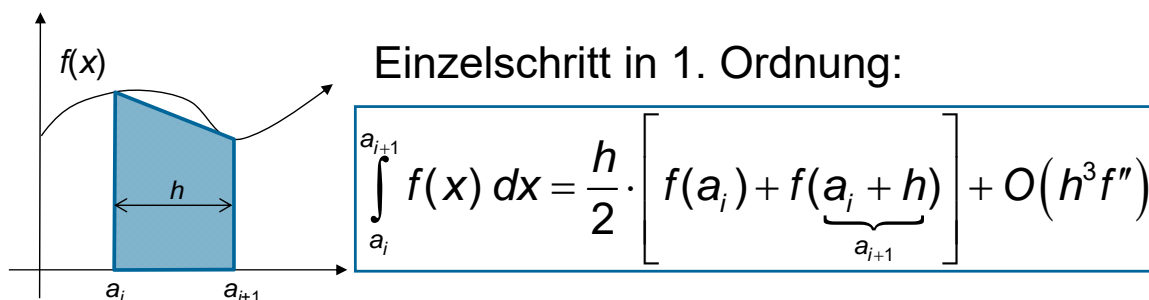
Ablaufdiagramm → Programm:



Bestimmung von π nach Archimedes



Trapezregel



gesamter Bereich (Trapezregel):

$$\begin{aligned} \int_a^b f(x) dx &\approx \sum_{i=0}^{n-1} \frac{h}{2} \cdot [f(a_i) + f(a_{i+1})] \quad \text{mit} \quad a_0 = a, a_n = b \\ &= \frac{h}{2} \cdot [f(a_0) + 2f(a_1) + 2f(a_2) + \dots + 2f(a_{n-1}) + f(a_n)] \end{aligned}$$