

$$t := 0, 0.001.. 1 \quad x(t) := \sin(2 \cdot \pi \cdot t)$$

$$n := 0.. 100 \quad T_A := 0.02 \quad t_n := n \cdot T_A$$

Delta-Modulation

$$\Delta s := \frac{1}{3} \quad x1_0 := -\frac{\Delta s}{4}$$

$$x1_{n+1} := 2 \cdot \left(\Phi(x(t_n) - x1_n) - \frac{1}{2} \right) \cdot \Delta s + x1_n$$

Delta-Sigma-Modulation

$$y_0 := 1$$

$$y_{n+1} := 2 \cdot \left[\Phi \left[\sum_{i=0}^n \int_{i \cdot T_A}^{(i+1) \cdot T_A} (x(t) - y_i) dt \right] - \frac{1}{2} \right]$$

