

**procedure** SA( $f : \mathbb{X} \mapsto \mathbb{R}, T_0, \varepsilon$ )

randomly sample  $x_c$  from  $\mathbb{X}$ ;  $y_c \leftarrow f(x_c)$ ;

$\tau \leftarrow 0$ ;  $\triangleright \tau$  is iteration counter

**while**  $\neg$  terminate **do**

$x_n \leftarrow \text{move}(x_c)$ ;  $y_n \leftarrow f(x_n)$ ;

$\tau \leftarrow \tau + 1$ ;

$T \leftarrow T_0(1 - \varepsilon)^{\tau-1}$ ;  $\triangleright T$  decreases over time

**if**  $\mathfrak{R}_0^1 < e^{\frac{y_c - y_n}{T}}$  **then**  $\triangleright$  always true if  $y_n \leq y_c$

$x_c \leftarrow x_n$ ;  $y_c \leftarrow y_n$ ;