

$$f(x) \rightarrow (f\ x)$$

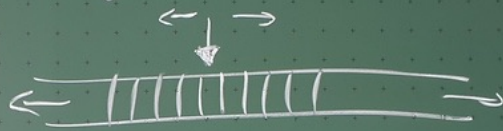
$$f(x) = x^2$$

$$g(t) = t^2 \quad f = g$$

$$f(x, y) = x^2 + y^2$$

$$f(x, x) = x^2 + x^2 \quad ??$$

Turing-Maschine



Prozedural: C

$i++;$

$i = i + 1;$

Haskell:  $x : xs$

$[1, 2, 3] = 1 : (2 : (3 : []))$

$listsum(x : xs, y : ys)$

$= (x + y) : listsum(xs, ys)$

$$f: \mathbb{R} \times \mathbb{R} \rightarrow \mathbb{R}$$

$$(x, y) \mapsto f(x, y)$$

C-Funktion:

```
int f(int x, int y) {  
    }  
}
```

$$f: \mathbb{R} \rightarrow \mathbb{R}^{\mathbb{R}}$$

$$f(x): \mathbb{R} \rightarrow \mathbb{R}$$

$$f(x)(y)$$