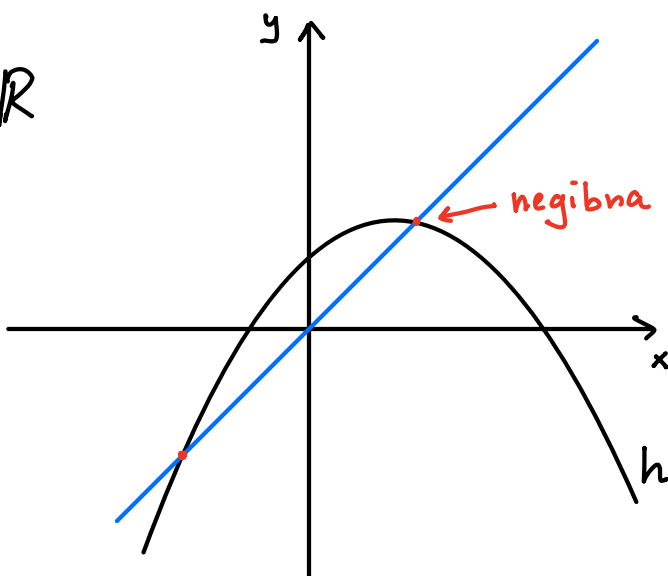


# Rekurzija

$$h: \mathbb{R} \rightarrow \mathbb{R}$$



$$x = h(x)$$

$$x^2 = \frac{1}{2}$$

$$x = \pm \sqrt{\frac{1}{2}} = 0.707\dots$$

$$x = h(x)$$

$$0 = \frac{1}{2} - x^2$$

$$x_0 = 1$$

$$x_1 = h(x_0) = \frac{1}{2}$$

$$x = \underbrace{\frac{1}{2} - x^2 + x}_{h(x)}$$

$$x_2 = h(x_1) = \frac{3}{4}$$

$$\vdots$$

$\binom{n}{k}$  = št. podmnožic s k elem. množice z n elementi

$$\binom{n}{0} = 1$$

$$\binom{n}{n} = 1$$

$$\binom{n}{k} = \binom{n-1}{k-1} + \binom{n-1}{k}$$

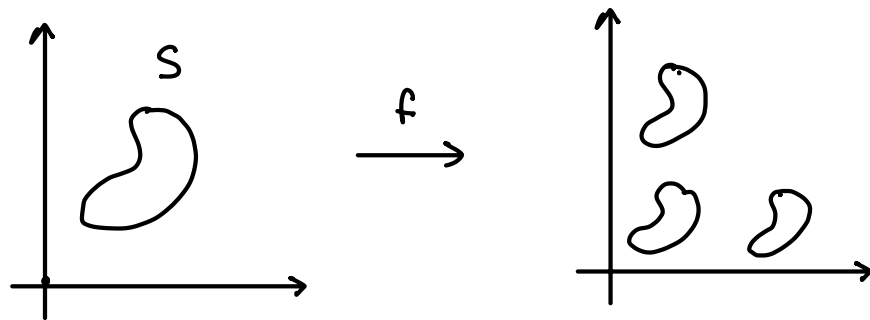
$$\{1, \dots, n\}$$

↑

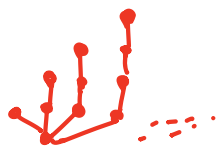
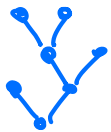
$$[1, 2, 1, 2, 1, 2, \dots]$$

# Fraktali

$f(S) ::=$



Induktivni tip : samo končni podatki  
(seznam, drevo)



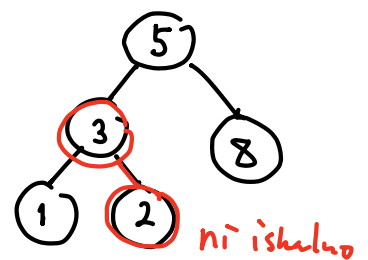
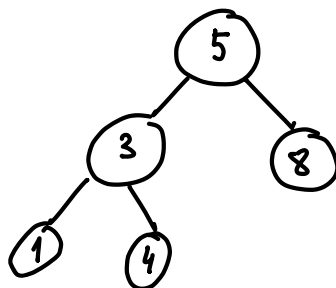
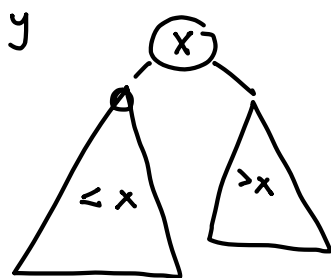
*dobro-osnovano*

[pravilno: dobro osnovani podatki,  
well-founded]

Koinduktivni tip : končni & neskončni podatki

## Strukturna rekurzija

Iskalno drevo



velikost = število vozlišč

