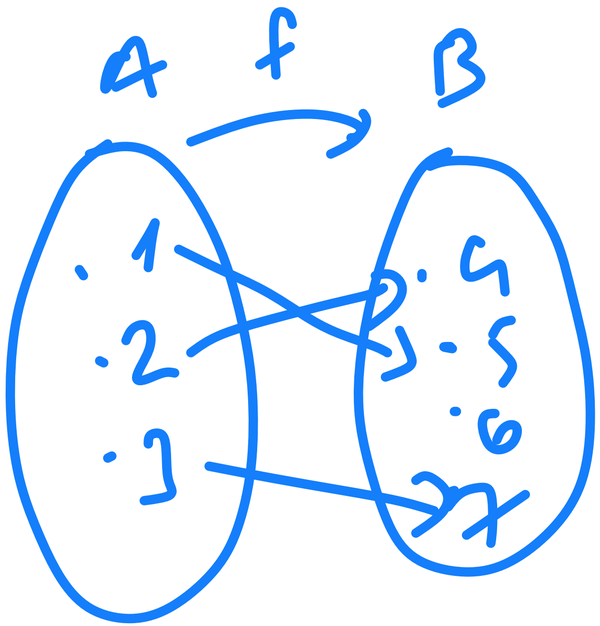
Fonksiyon Türleri:

1. Bire-bir Fonksiyon:



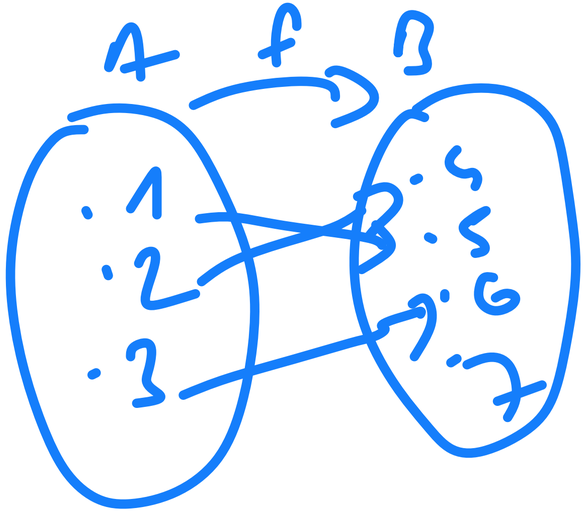
∀ Her bir 0 farklı yerlere gitecek.

$s(A) \leq s(B)$

$f: \mathbb{R} \to \mathbb{R}$, $f(x) = x^2$

$f: \mathbb{N} \to \mathbb{N}$, $f(x) = x^3 + 1$

2. İçine Fonksiyon:

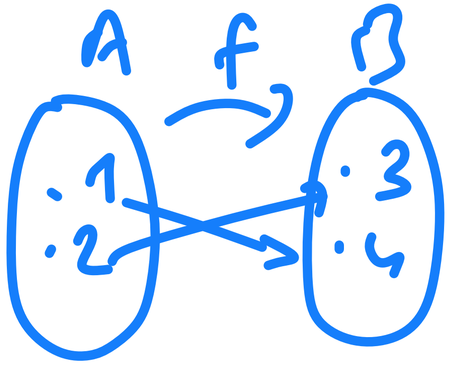


∀ D.K de
∃ açıkta eleman kalıcak.

$f: \mathbb{N} \to \mathbb{R}$, $f(x) = x+3$

$f: \mathbb{R} \to \mathbb{R}$ $f(x) = 2x+1$

3. Örten Fonksiyon:



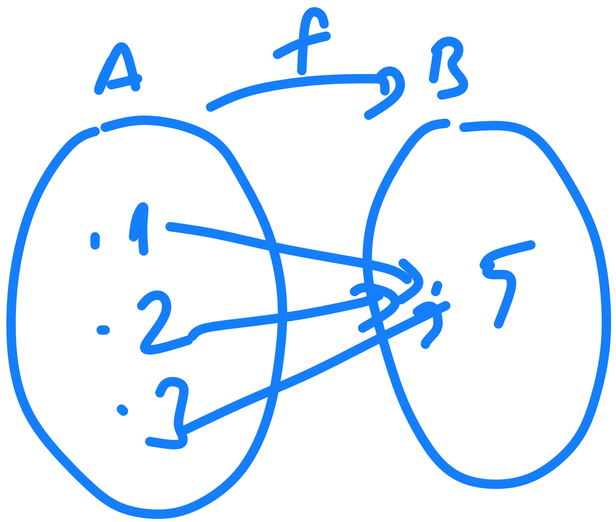
∀ D.K de açıkta
∄ eleman kalmıcak.

$s(A) \geq s(B)$

Yatay D. Testi: 1-1 Örten

x eks. çizilen doğ. grf. tek nok. kesmeli

Sabit Fonks. - Sıfır Fonk.



Herkes bir kişiye gitcek.

$f(x) = c$

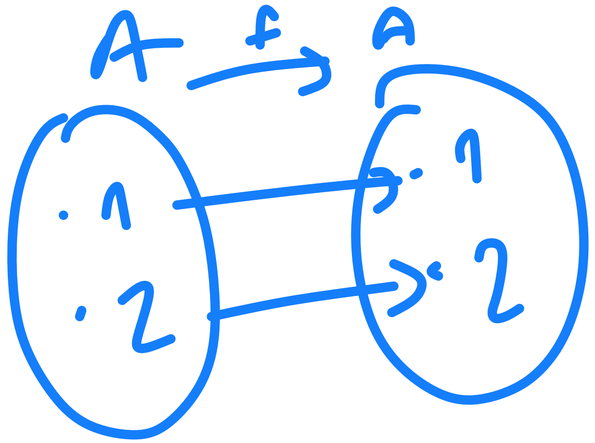
NOT: $f(x) = \frac{ax+b}{cx+d}$

sabit ise:

$$\frac{a}{c} = \frac{b}{d}$$

$f(x) = 0$ fonk. sabit fonk. denir.

Birim Fonks. I



Tanım: - Dısı Aynı

$f(x) = x$

7 $f(x) = (a-3)x^7 + 5x - bx + a + b$

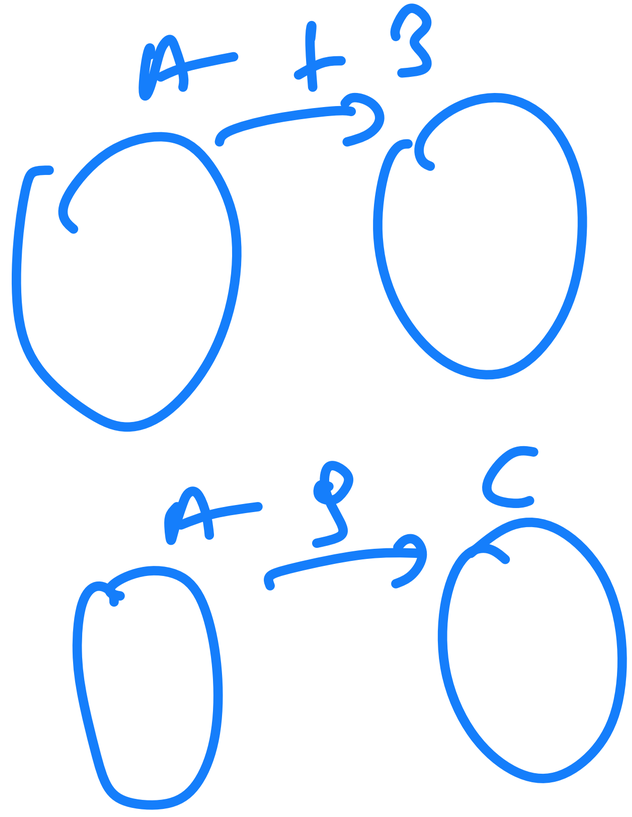
sabit fonk. old. göre, $f(100) = ?$

7 $f: \mathbb{R} \longrightarrow \mathbb{R}$ o.ü $y=f(x)$ birim fonk

$$f(5x-2)=(a-3)x^2+bx-3x+c$$

old. göre, $a.b-c=?$

Eşit Fonk.



∀ T.K aynı G.K. aynı olsun

$$f(x) = g(x)$$

↳ Aynı dereceli terimlerin katsayıları eşit.

$\exists \quad f: \mathbb{N} \to \mathbb{N} \qquad f(x) = 5x + b$

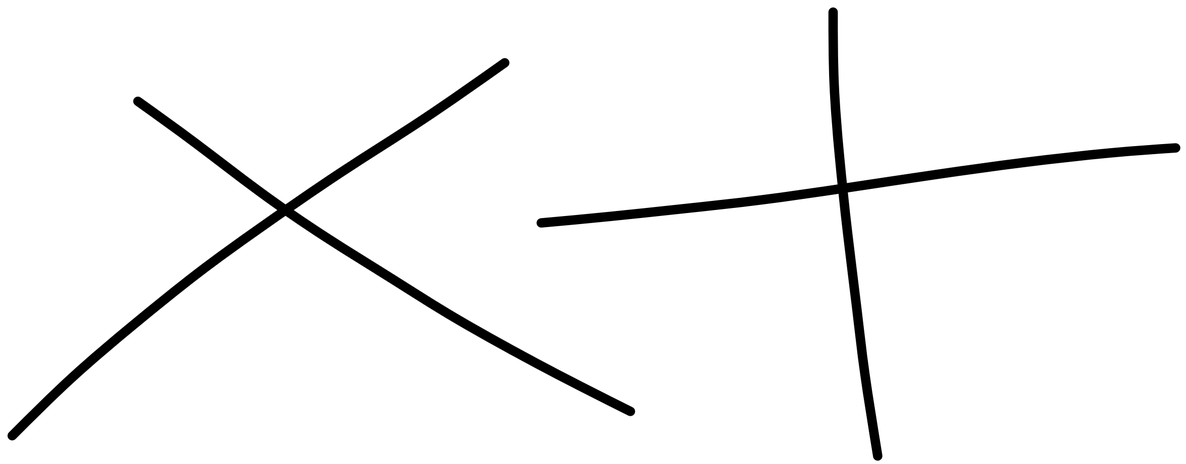
$g: \mathbb{N} \to \mathbb{Z} \qquad g(x) = (a+1)x + a + 4$

file g est fnh old-gsre , $a \cdot b = ?$

Doğrusal Fonk.

a ve b gerçek sayı

$f: \mathbb{R} \to \mathbb{R}$, $\boxed{f(x) = ax + b}$



T $f: \mathbb{R} \to \mathbb{R}$ o.ü.

$f(x) = (a-3)x^2 + ax + a+1$

doğrusal fonk. old. göre

$f(5) = ?$

T f(x) doğrusal fonk. dir.

$f(2) = 4$

$f(1) = 12$

old $> e$, $f(3) = ?$