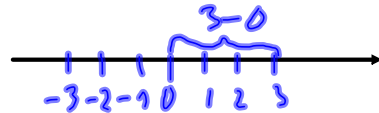


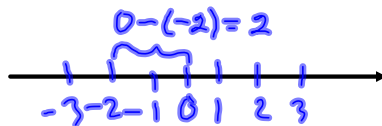
## Itseisarvo

luvun itseisarvo ilmaistaa luvun etäisyyttä nolasta.

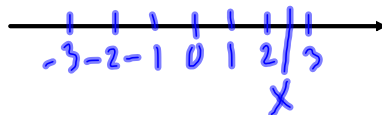
esim. a)  $|3| = 3 = 3 - 0$



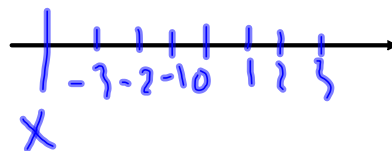
b)  $|-2| = 2 = 0 - (-2)$   
 $= -(-2)$



c)  $|x| = x$ , kun  $x > 0$



d)  $|x| = -x$ , kun  $x < 0$



## Määntelmä

$$|x| = \begin{cases} x, & \text{kun } x \geq 0 \\ -x, & \text{kun } x < 0 \end{cases}$$

Positiivisen luvun its.arvo on luvun itse.

Neg. luvun its.arvo on luvun vastaluku.

Nollan itseisarvo on nolla.

esim. a)  $|\pi - 3| = \underline{\pi - 3}$ ,  $\pi - 3 \approx 0,14$  eli posit.

b)  $|\sqrt{2} - 2| = -(\sqrt{2} - 2)$ ,  $-0,59$  on neg.

$|\sqrt{2} - 2|$   
 $= \sqrt{2} + 2$   
 $= \underline{\underline{2 - \sqrt{2}}}$