ESERCIZI SULLE FUNZIONI

DISEGNARE IL GRAFICO DELLA FUNZIONE $f(x) = -\sqrt{2-x}$

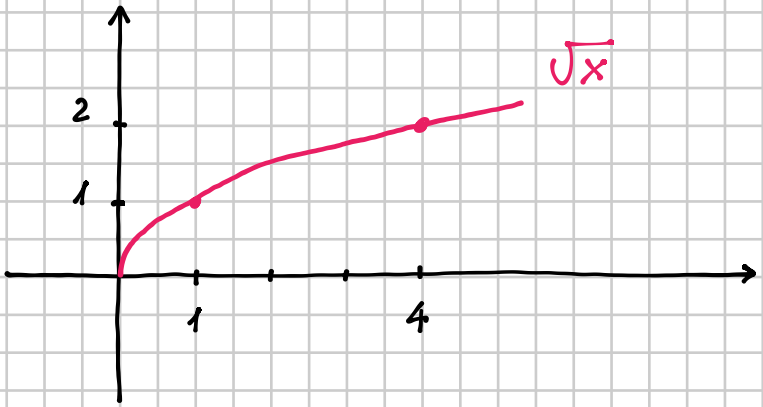
Per passi successivi:

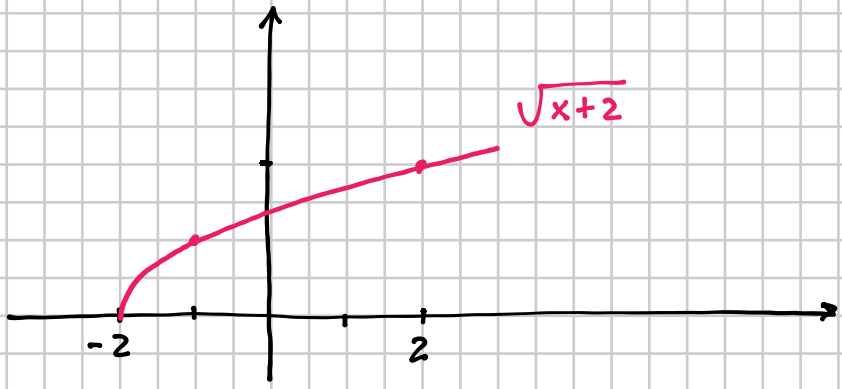
$\sqrt{x} \longrightarrow \sqrt{x+2} \longrightarrow \sqrt{-x+2} \longrightarrow -\sqrt{-x+2}$

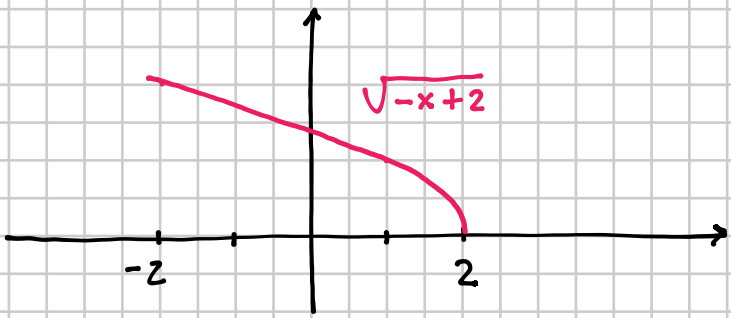
$h(x) \longrightarrow h(x+2)$ traslazione a sinistra

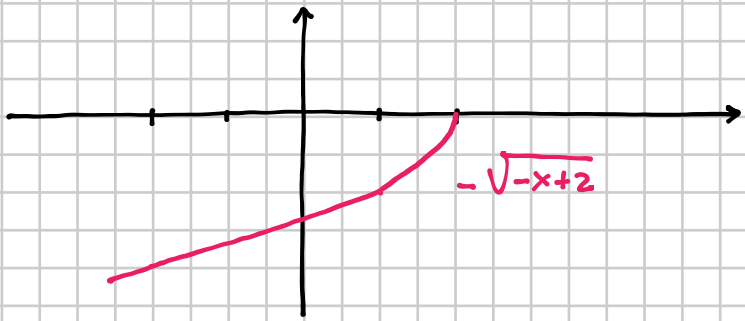
$g(x) \to g(-x)$ simmetria rispetto all'asse y

$\pi(x) \to -\pi(x)$ simmetria rispetto all'asse x



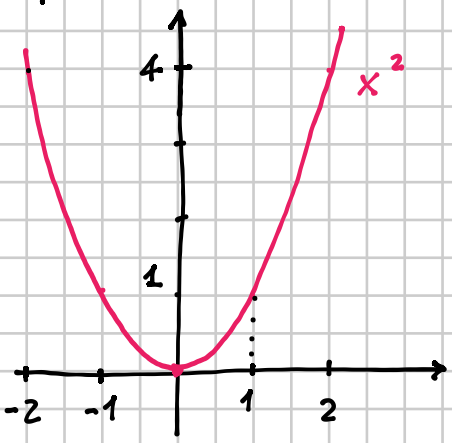


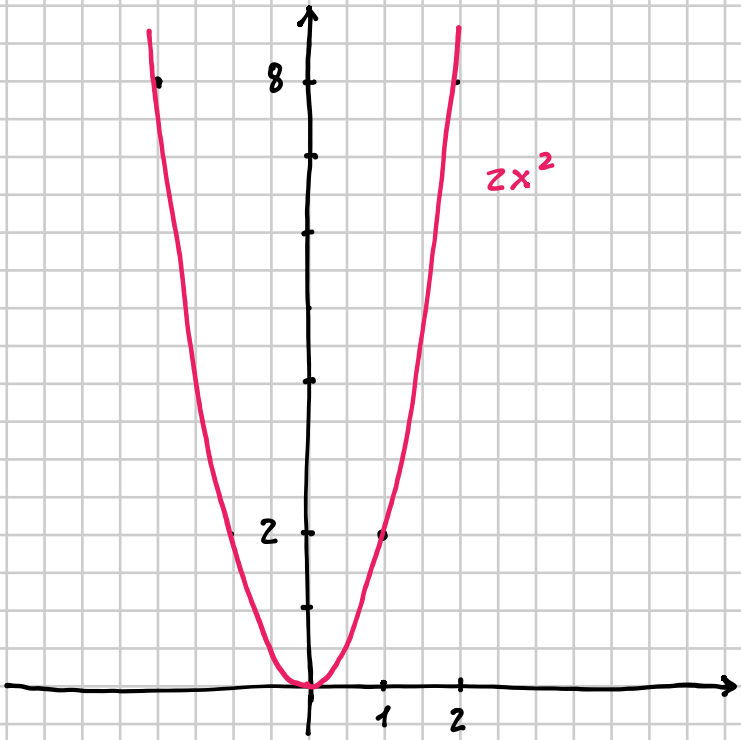


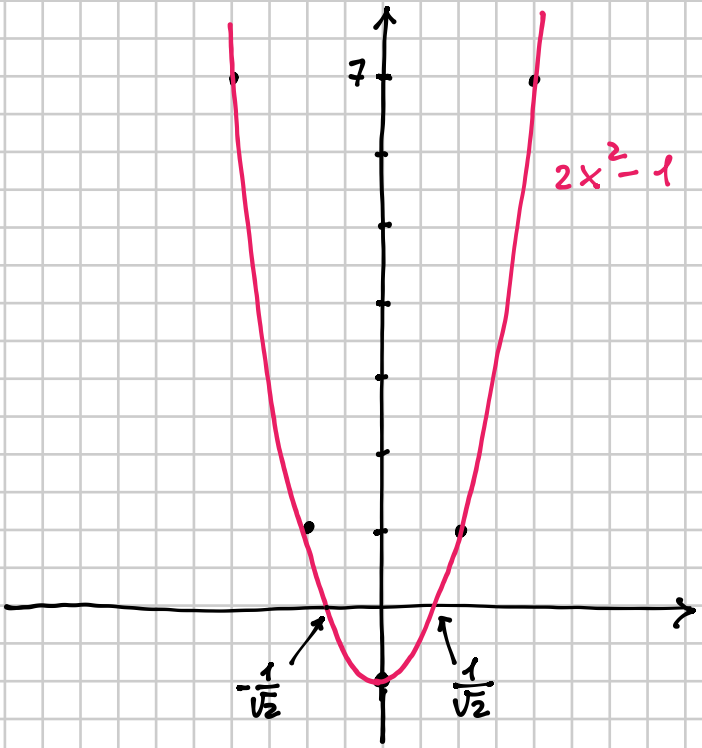


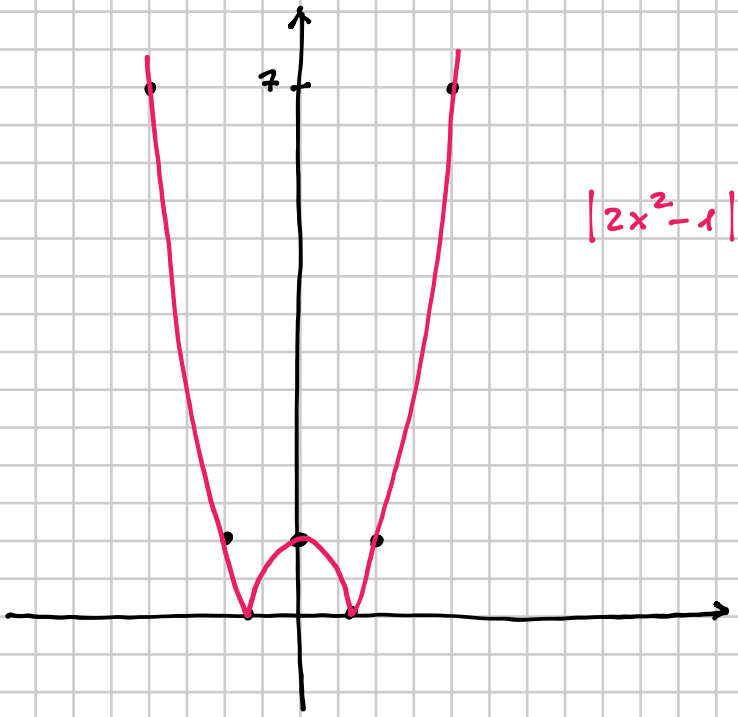
DISEGNARE IL GRAFICO DI $f(x) = |2x^2 - 1|$

passi: $x^2 \longrightarrow 2x^2 \longrightarrow 2x^2 - 1 \longrightarrow |2x^2 - 1|$





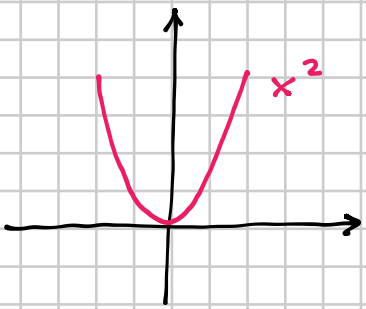


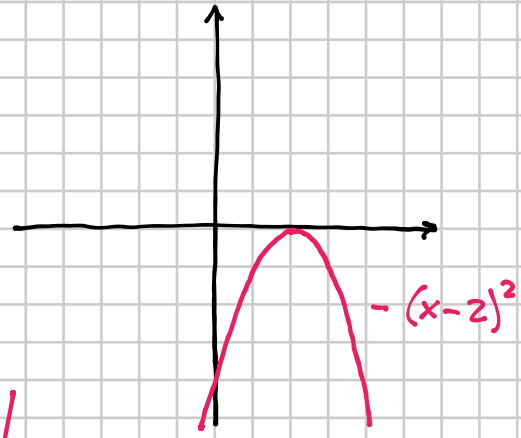


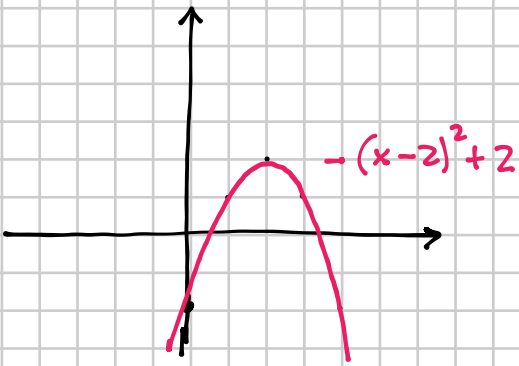
DISEGNARE $f(x) = -2\left|-(x-2)^2+2\right|$

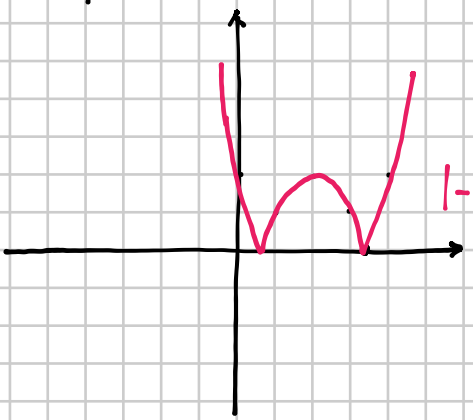
$x^2 \longrightarrow (x-2)^2 \longrightarrow -(x-2)^2 \longrightarrow -(x-2)^2+2$

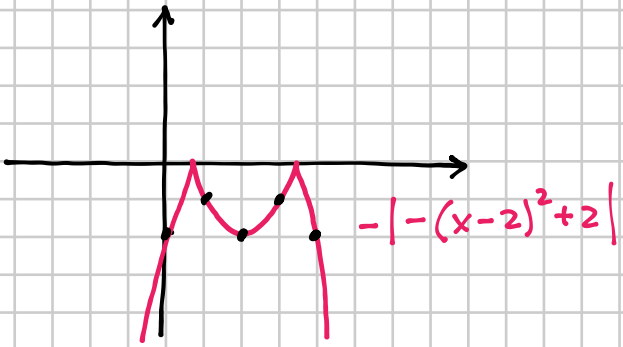
$\longrightarrow \left|-(x-2)^2+2\right| \longrightarrow -\left|-(x-2)^2+2\right| \longrightarrow -2\left|-(x-2)^2+2\right|$

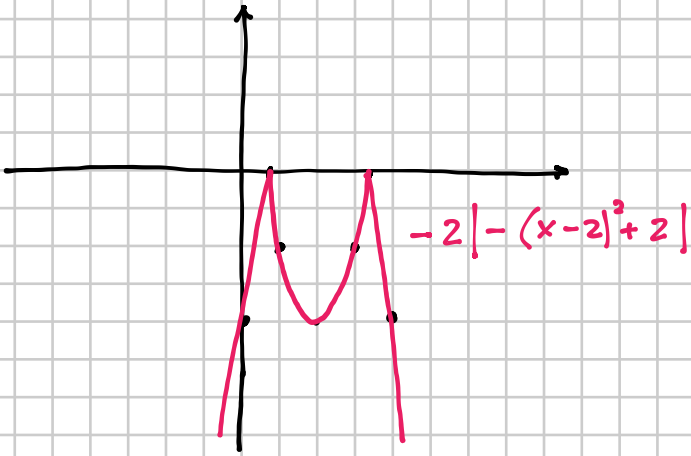






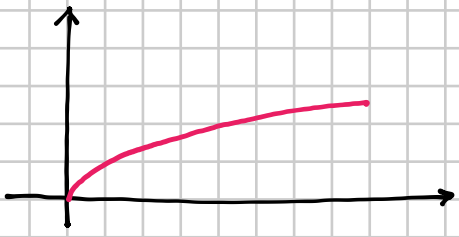




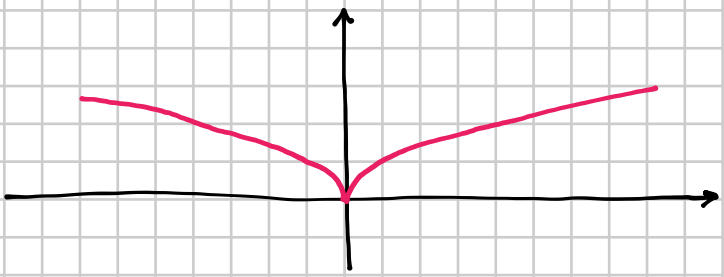


DISEGNARE $y = \sqrt{|x|}$

$\sqrt{x}$

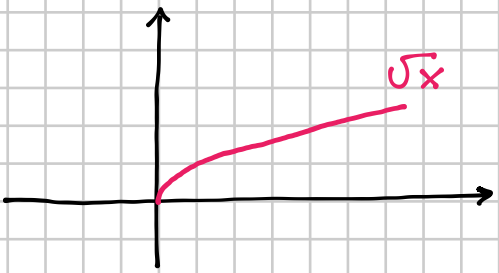


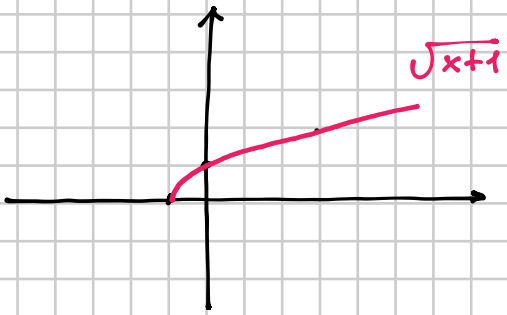
$\sqrt{|x|}$



$\sqrt{|x|+1}$

$\sqrt{x} \rightarrow \sqrt{x+1} \rightarrow \sqrt{|x|+1}$

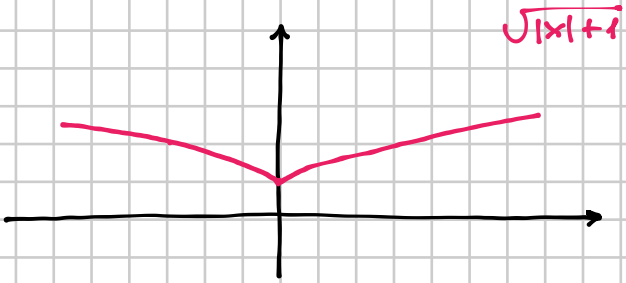




$f(x)$

↓

$f(|x|)$



Qual é la differenza tra $y = |x| + 1$ e $y = |x+1|$