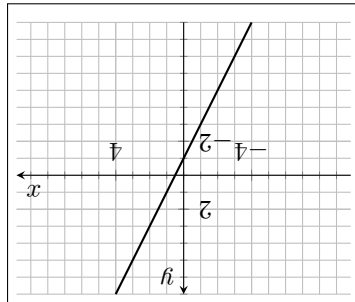


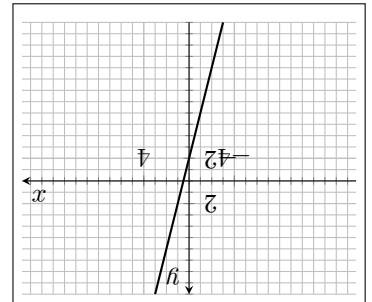
## Függvények gyakorló

1. Ábrázold a következő függvényeket!

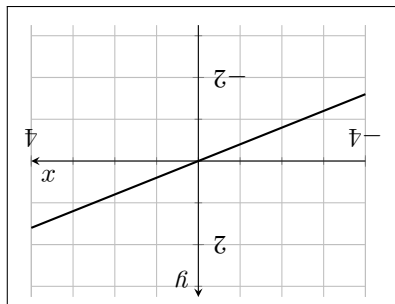
a)  $x \mapsto 2x - 1$



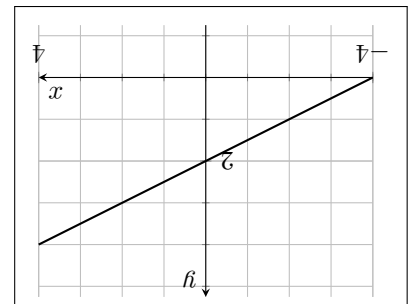
b)  $x \mapsto 4x - 2$



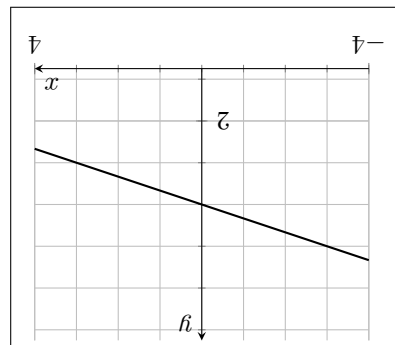
c)  $x \mapsto \frac{2}{5}x$



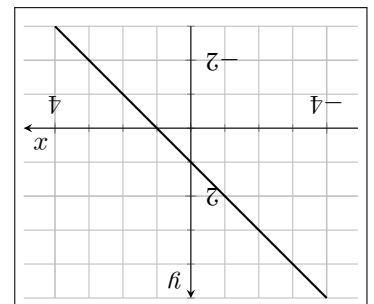
d)  $x \mapsto \frac{1}{2}x + 2$



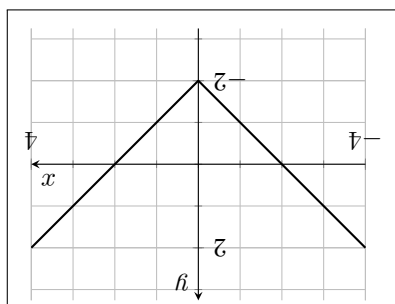
e)  $x \mapsto -\frac{1}{3} \cdot (x - 6) + 2$



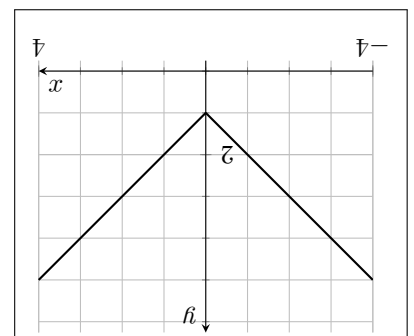
f)  $x \mapsto 2 \cdot (x + 2) - 3 \cdot (x + 1)$



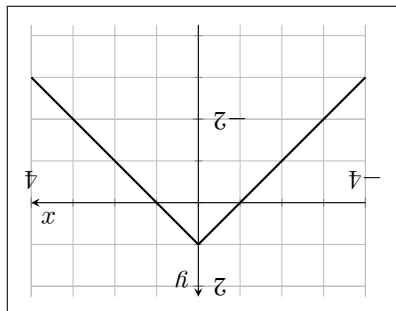
g)  $x \mapsto |x| - 2$



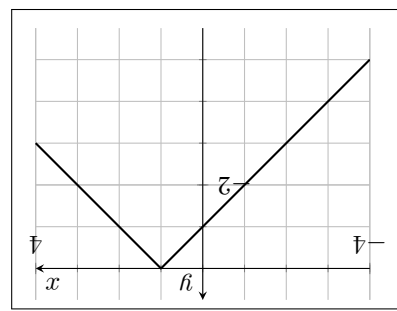
h)  $x \mapsto |x| + 1$



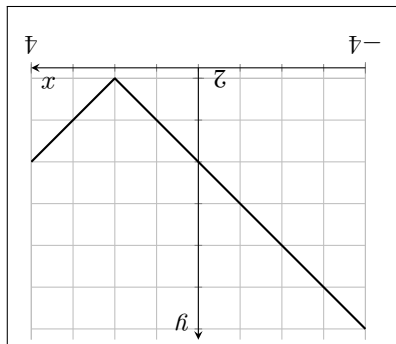
i)  $x \mapsto -|x| + 1$



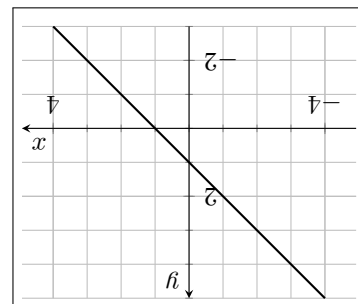
j)  $x \mapsto -|x - 1|$



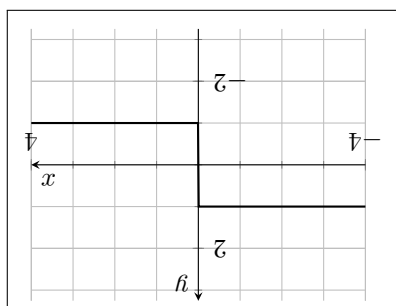
k)  $x \mapsto |x - 2| + 2$



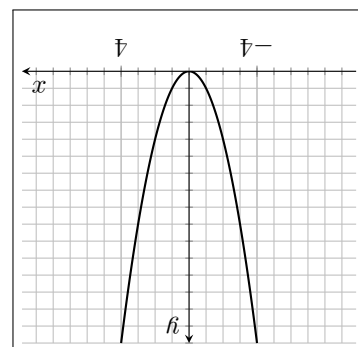
l)  $x \mapsto |x - 4| - 3$



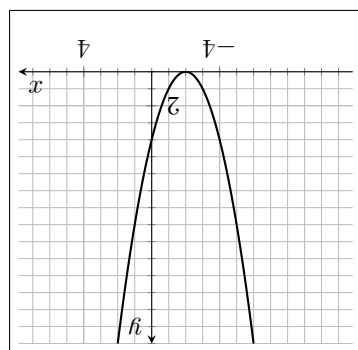
m)  $x \mapsto \frac{-|x|}{x}$



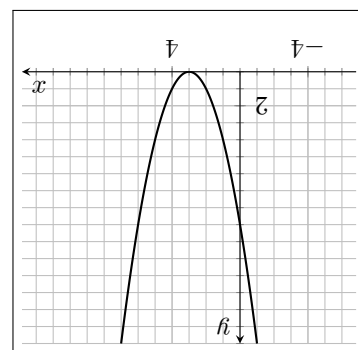
n)  $x \mapsto x^2 + 2$



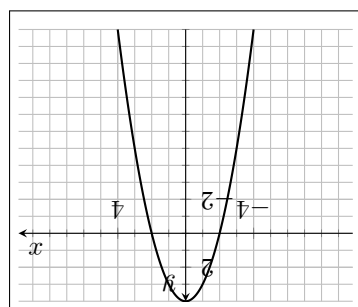
o)  $x \mapsto (x + 2)^2$



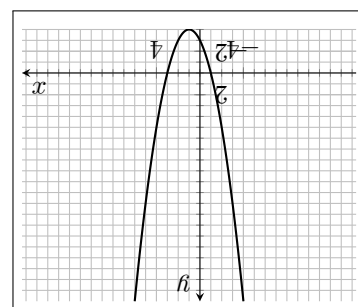
p)  $x \mapsto (x - 3)^2$



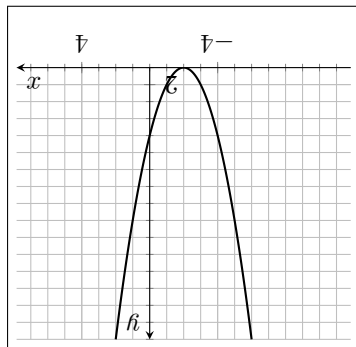
q)  $x \mapsto -x^2 + 4$



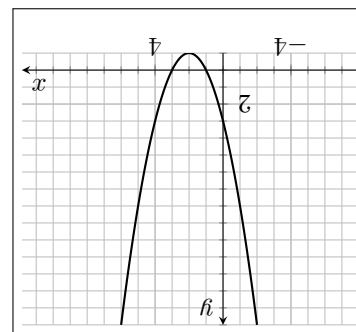
r)  $x \mapsto (x - 1)^2 - 4$



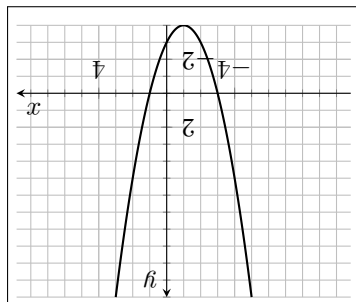
s)  $x \mapsto -(x+2)^2 + 1$



t)  $x \mapsto x^2 - 4x + 3$



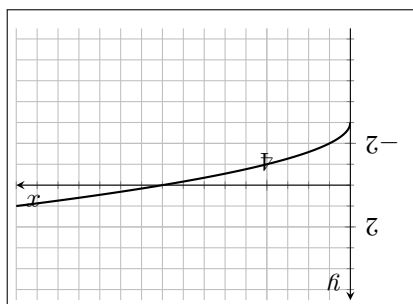
u)  $x \mapsto x^2 + 2x - 3$



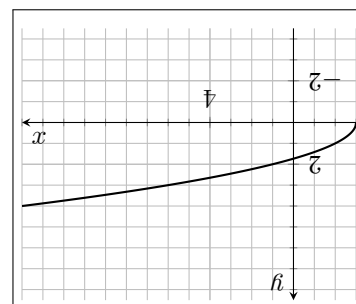
2. Az  $f(x) = ax + b$ ,  $x \in \mathbb{R}$  függvényről tudjuk, hogy  $a$  és  $b$  valós számok, valamint  $f(-1) = 2$  és  $f(2) = 3$ . Adjuk meg képlettel az  $f$  függvényt!

3. Ábrázold a következő függvényeket!

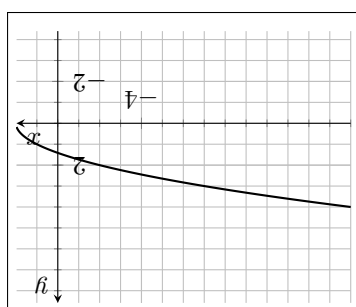
a)  $x \mapsto \sqrt{x} - 3$



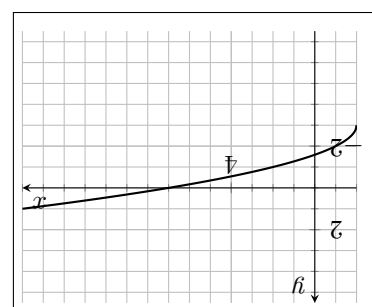
b)  $x \mapsto \sqrt{x+3}$



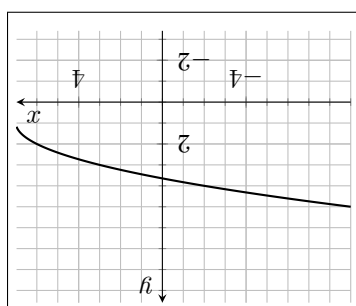
c)  $x \mapsto \sqrt{-x+2}$



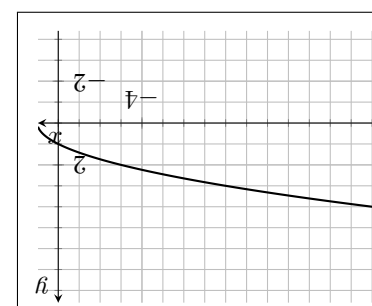
d)  $x \mapsto \sqrt{x+2} - 3$



e)  $x \mapsto \sqrt{7-x} + 1$

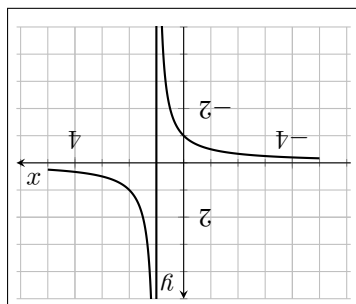


f)  $x \mapsto \sqrt{1-x}$

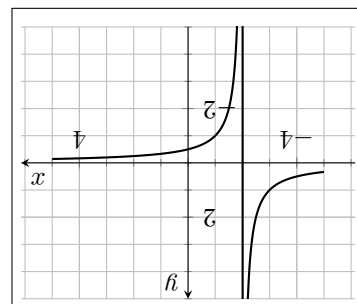


4. Ábrázold a következő függvényeket!

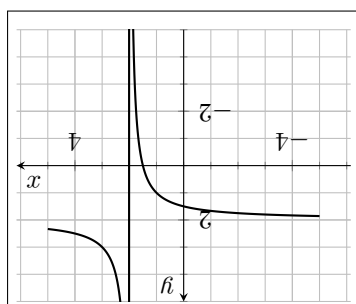
a)  $x \mapsto \frac{1}{x-1}$



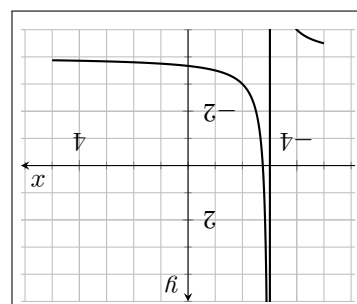
b)  $x \mapsto -\frac{1}{x+2}$



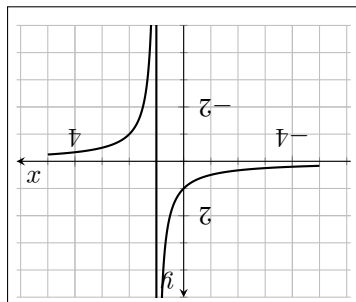
c)  $x \mapsto \frac{1}{x-2} + 2$



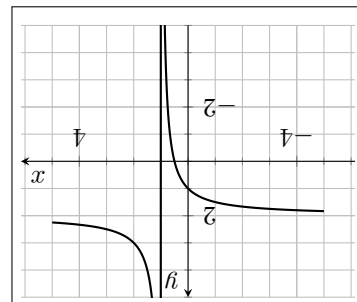
d)  $x \mapsto \frac{1}{x+3} - 4$



e)  $x \mapsto \frac{1}{1-x}$



f)  $x \mapsto \frac{2x-1}{x-1}$



g)  $x \mapsto \left| \frac{x-2}{x-3} \right|$

