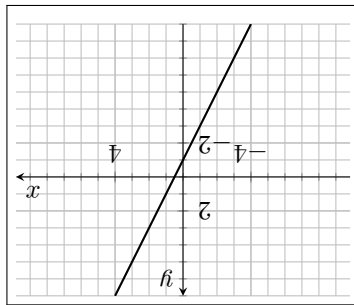


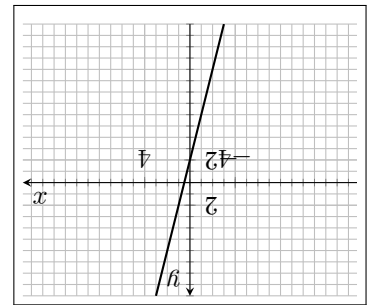
Függvények gyakorló

1. Ábrázold a következő függvényeket!

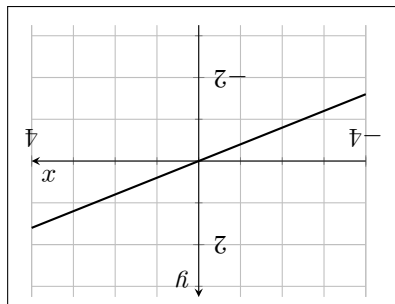
a) $x \mapsto 2x - 1$



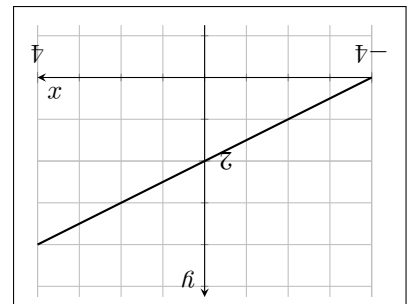
b) $x \mapsto 4x - 2$



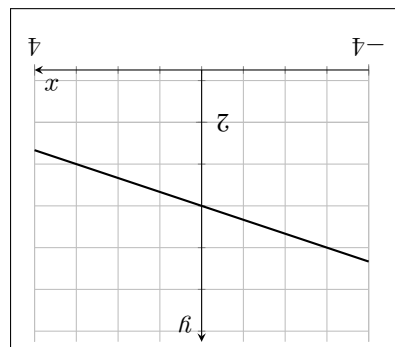
c) $x \mapsto \frac{2}{3}x$



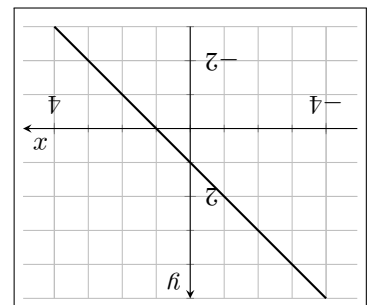
d) $x \mapsto \frac{1}{2}x + 2$



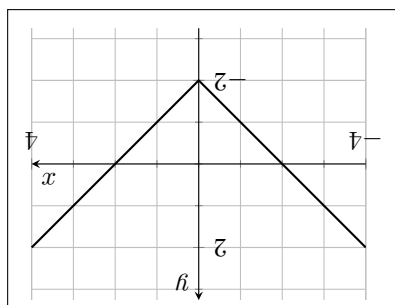
e) $x \mapsto -\frac{1}{3} \cdot (x - 6) + 2$



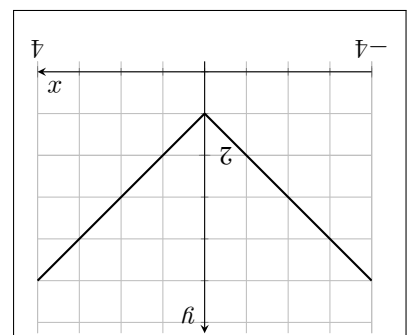
f) $x \mapsto 2 \cdot (x + 2) - 3 \cdot (x + 1)$



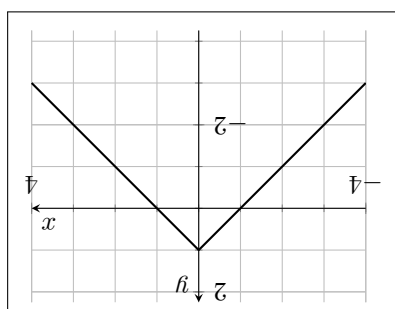
g) $x \mapsto |x| - 2$



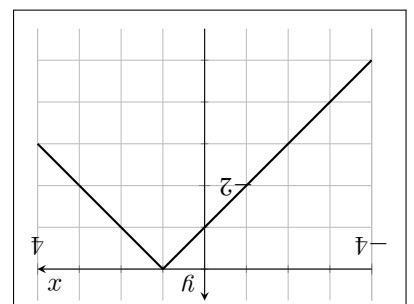
h) $x \mapsto |x| + 1$



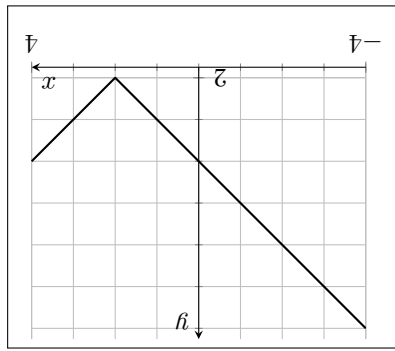
i) $x \mapsto -|x| + 1$



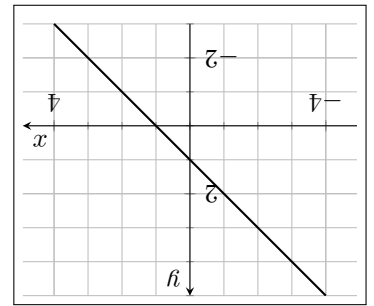
j) $x \mapsto -|x - 1|$



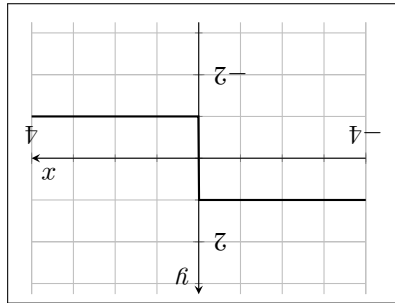
k) $x \mapsto |x - 2| + 2$



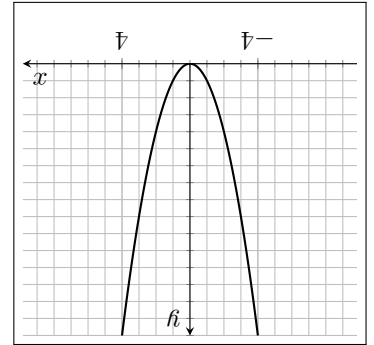
l) $x \mapsto |x - 4| - 3$



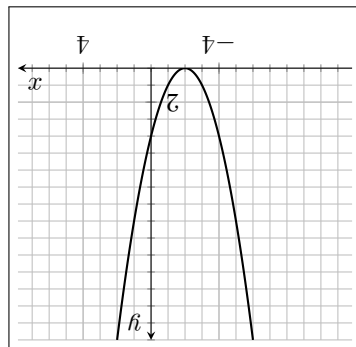
m) $x \mapsto \frac{-|x|}{x}$



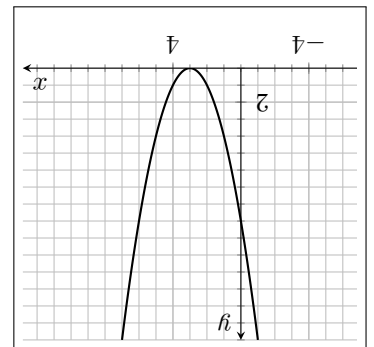
n) $x \mapsto x^2 + 2$



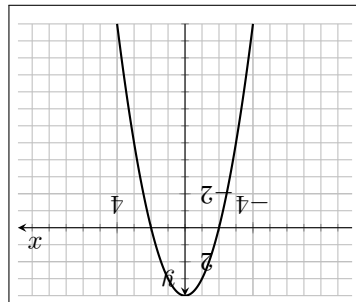
o) $x \mapsto (x + 2)^2$



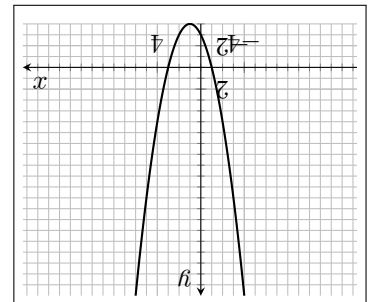
p) $x \mapsto (x - 3)^2$



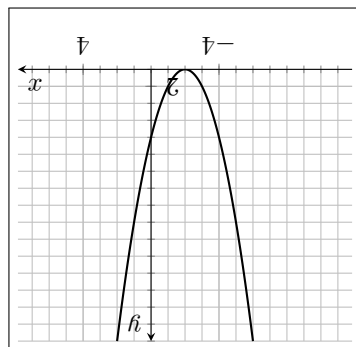
q) $x \mapsto -x^2 + 4$



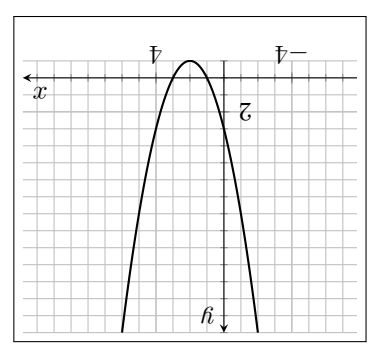
r) $x \mapsto (x - 1)^2 - 4$



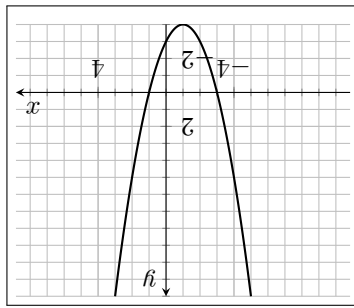
s) $x \mapsto -(x + 2)^2 + 1$



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



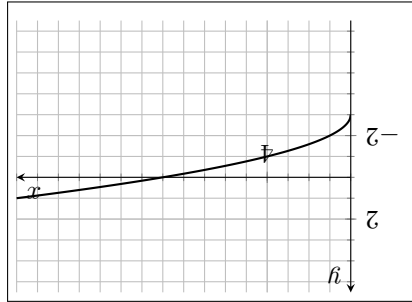
u) $x \mapsto x^2 + 2x - 3$



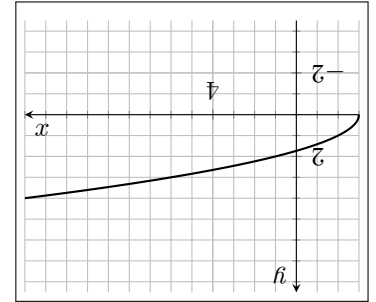
2. Az $f(x) = ax + b$, $x \in \mathbb{R}$ függvényről tudjuk, hogy a és b valós számok, valamint $f(-1) = 2$ és $f(2) = 3$. Adjuk meg képlettel az f függvényt!

3. Ábrázold a következő függvényeket!

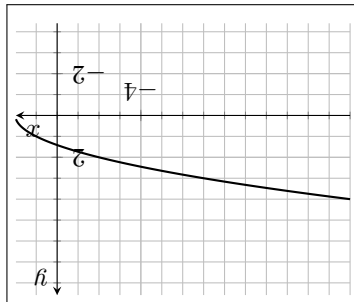
a) $x \mapsto \sqrt{x} - 3$



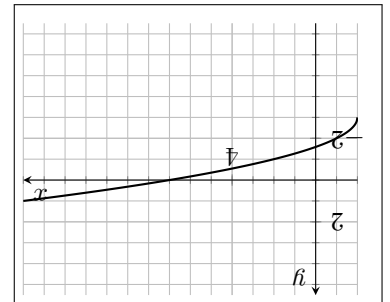
b) $x \mapsto \sqrt{x+3}$



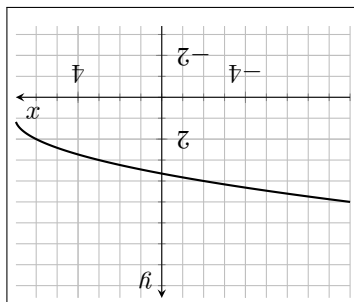
c) $x \mapsto \sqrt{-x+2}$



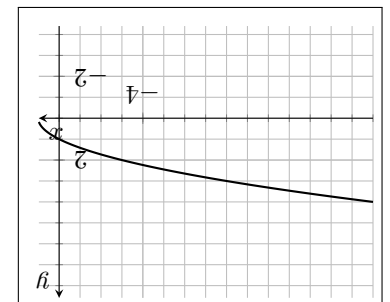
d) $x \mapsto \sqrt{x+2} - 3$



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

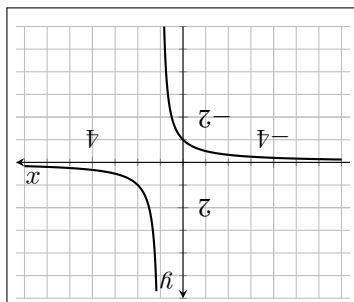


f) $x \mapsto \sqrt{1-x}$

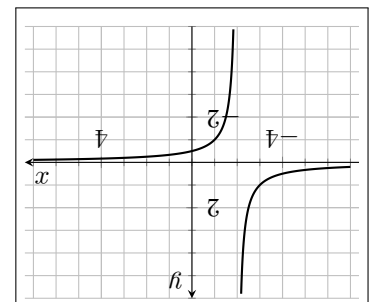


4. Ábrázold a következő függvényeket!

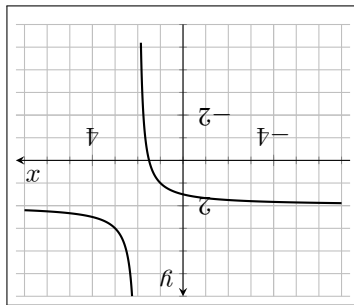
a) $x \mapsto \frac{1}{x-1}$



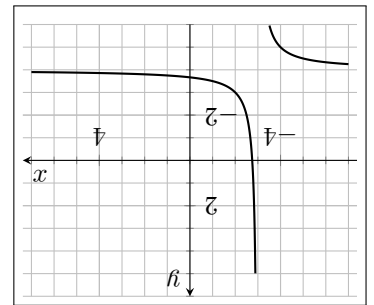
b) $x \mapsto -\frac{1}{x+2}$



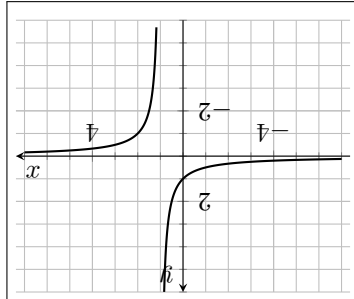
c) $x \mapsto \frac{1}{x-2} + 2$



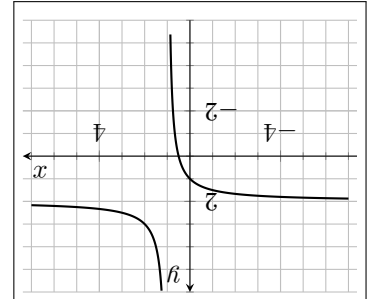
d) $x \mapsto \frac{1}{x+3} - 4$



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



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



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

