

# Feladatok

Ábrázoljuk és jellemezzük a következő függvényt:

$$f(x) = |x + 4| - 2$$

Tul:

1.  $D_f : \mathbb{R}$

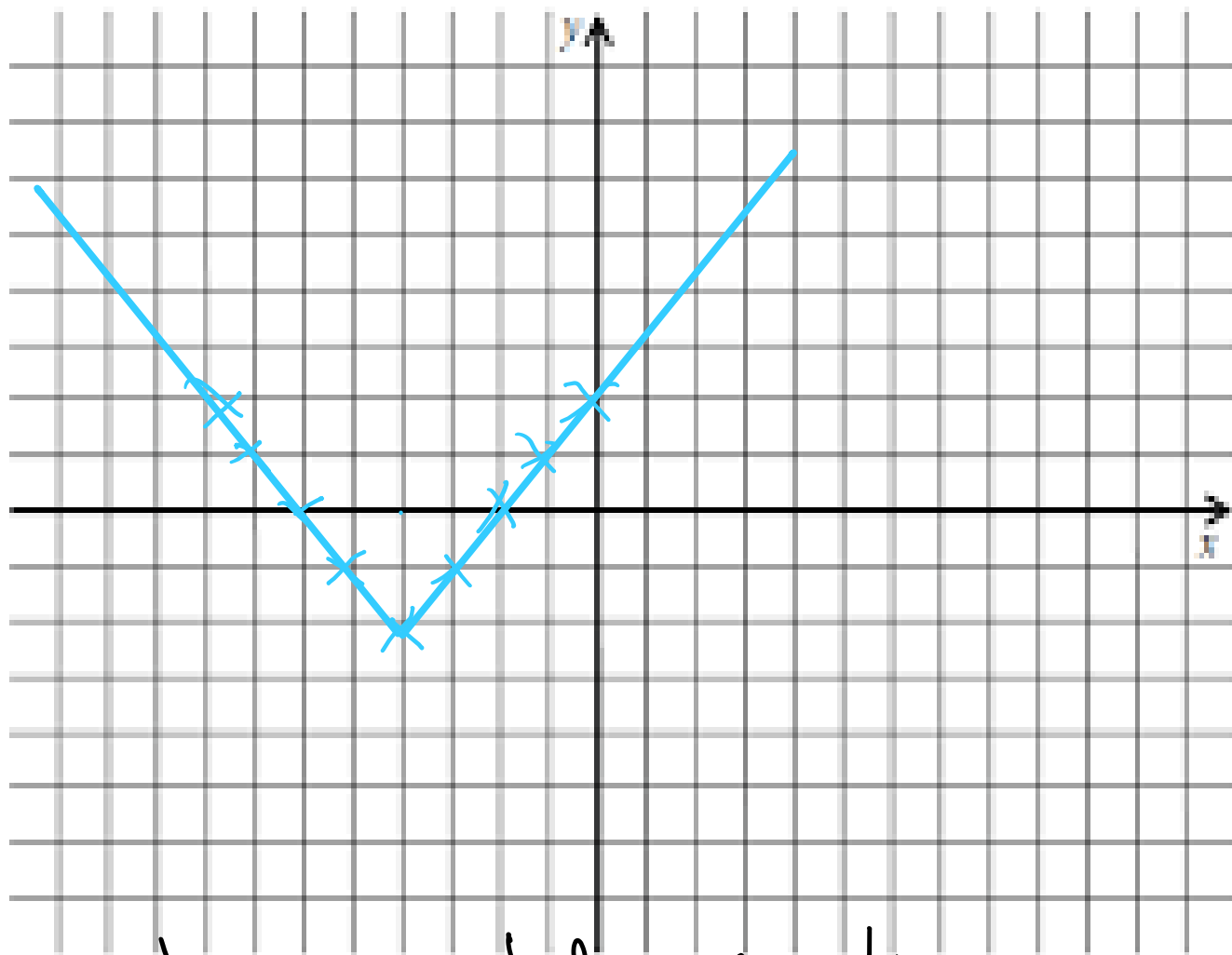
2.  $R_f : [-2; \infty[$

3. Zh:  $x_1 = -2$   
 $x_2 = -6$

4. Monotonia:

ha  $x \leq -4 \Rightarrow \searrow$

ha  $x > -4 \Rightarrow \nearrow$



5. vel: min. hely:  $x = -4$   
min. érték:  $f(x) = -2$

$$f(x) = (x - 3)^2 + 2$$

Tut:

1.  $D_f: \mathbb{R}$

2.  $Q_f: [2; \infty[$

3.  $Z_h: -$

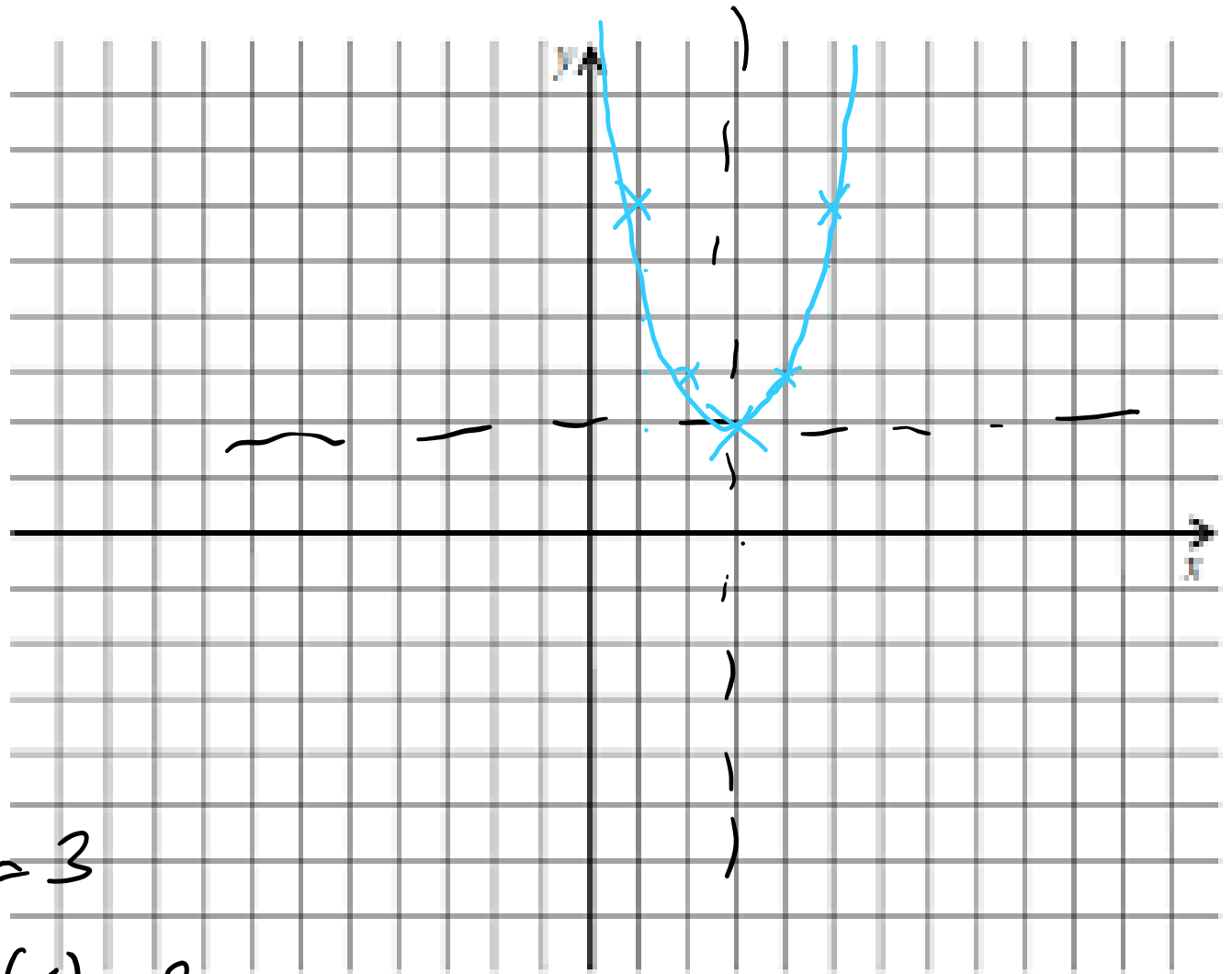
4. monotonie:

h<sub>a</sub>  $x \leq 3$   $\searrow$

h<sub>a</sub>  $x > 3$   $\nearrow$

5.  $w_{\text{rel}}$ : min. Wert:  $x = 3$

min.  $w_{\text{rel}}$ :  $f(x) = 2$



$$f(x) = -|x - 2| + 5$$

Tul:

1.  $D_f: \mathbb{R}$

2.  $W_f: ]-\infty; 5]$

3. Zh:  $x_1 = -3$   
 $x_2 = 7$

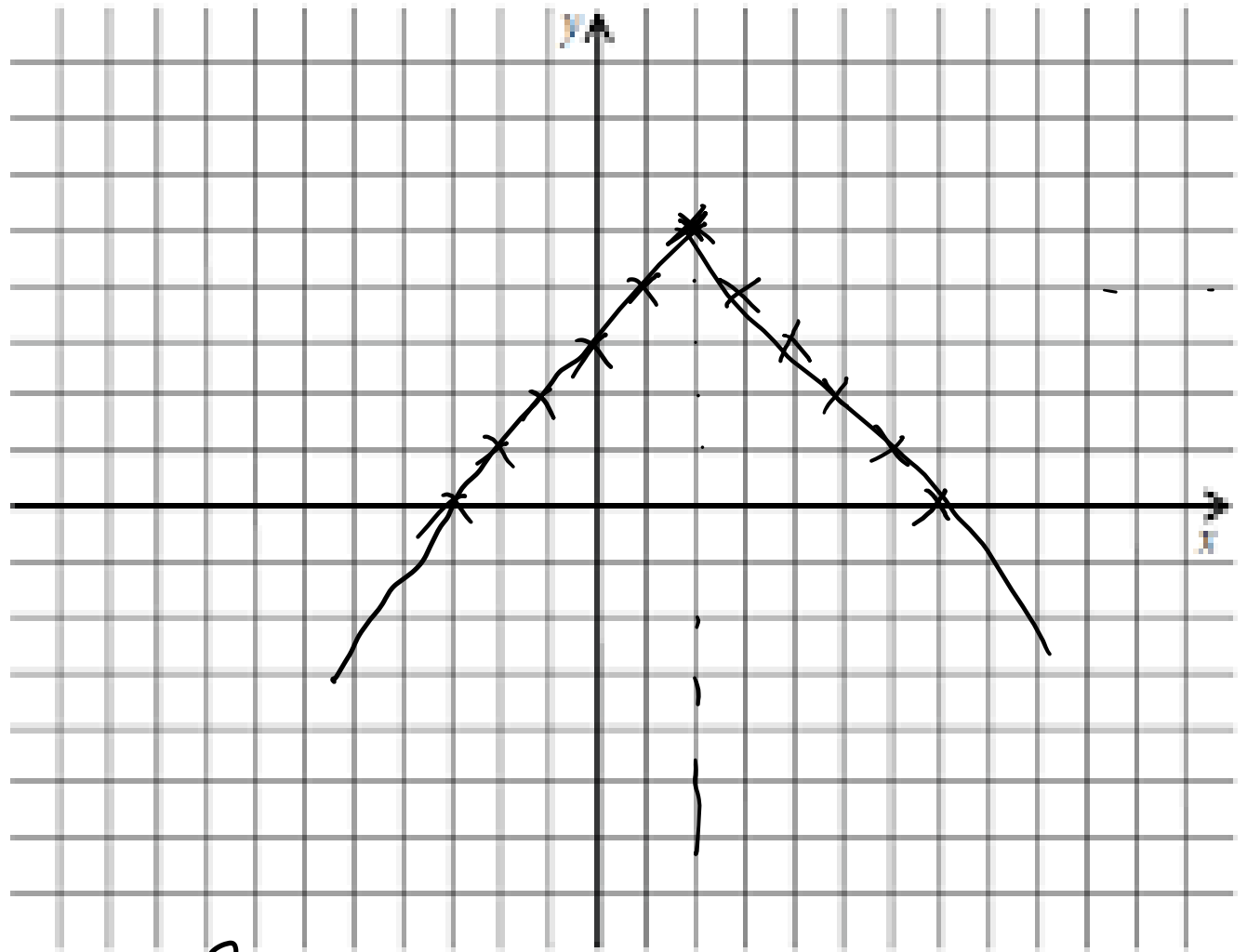
4. merete:

ha  $x \geq 2$   $\rightarrow$

ha  $x < 2$   $\rightarrow$

5. szel:

max. hely:  $x = 2$   
max. érték:  $y = 5$



$$f(x) = 2x^2 - 2$$

Tut:

1.  $D_f: \mathbb{R}$

2.  $R_f: [-2; \infty[$

3.  $Z_h: x_1 = 1 \quad x_2 = -1$

4. monotonie:

ha  $x \leq 0 \Rightarrow \searrow$

ha  $x > 0 \Rightarrow \nearrow$

5. Extremwerte:

min. wert:  $x = 0$

min. wert:  $y = -2$

