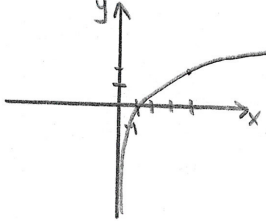


Paulina Nowak Extra Homework 2 EPM 1/2 →

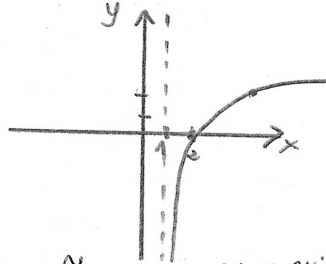
$$y = |\log_2(x-1) - 1| + 1$$

① $\log_2 x$



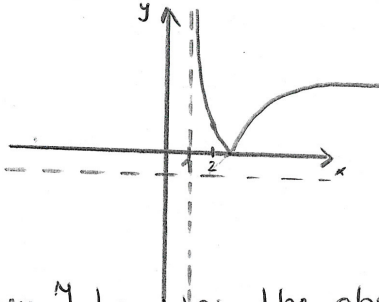
I start with a logarithm of x with base 2
 $D_{y_1} = (0; \infty)$ $A_{y_1} = \mathbb{R}$

② $\log_2(x-1)$



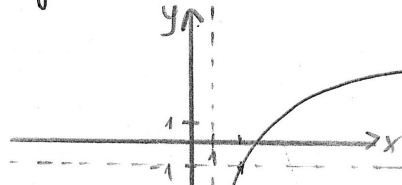
then I move my previous graph by 1 to the right
 $D_{y_2} = (1; \infty)$ $A_{y_2} = \mathbb{R}$

④ $|\log_2(x-1) - 1|$



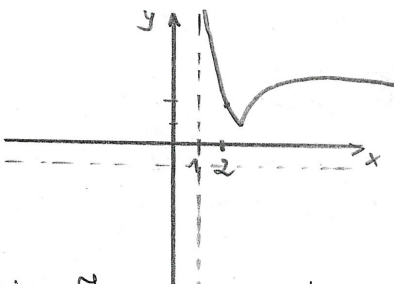
then I to obtain the absolute value, the negative part of the previous graph goes up
 $D_{y_4} = (1; \infty)$ $A_{y_4} = \langle 0; \infty$

③ $\log_2(x-1) - 1$



then I move graph by 1 to down
 $D_{y_3} = (2; 1; \infty)$ $A_{y_3} = \mathbb{R}$

⑤ $y = |\log_2(x-1) - 1| + 1$



Now I move graph by 1 to up
 I get main equation.
 $D_{y_5} = (1; \infty)$ $A_{y_5} = \langle 0; \infty$