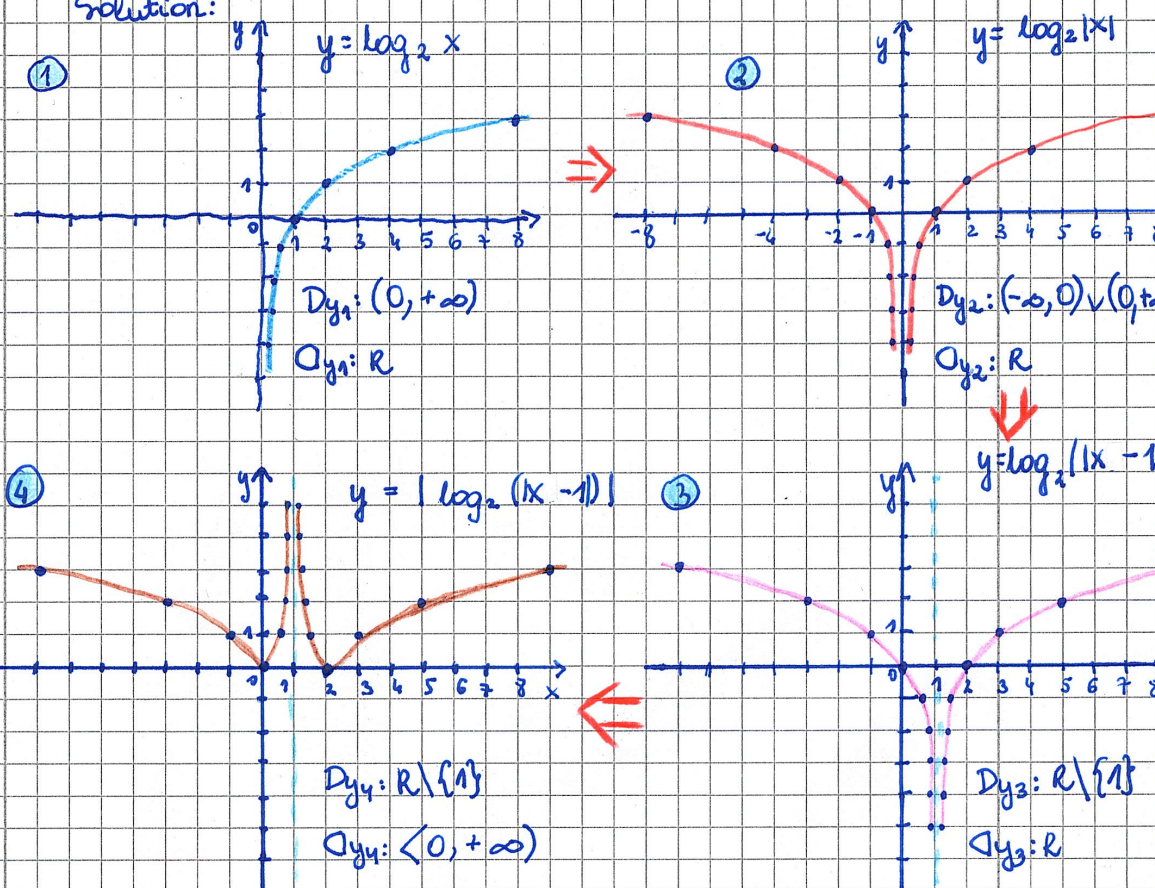


What to say in front of the blackboard - a brief tutorial

Exercise: Draw the graph of $y = |\log_2(x-1)|$.
State the domain and the co-domain of each function.

Solution:

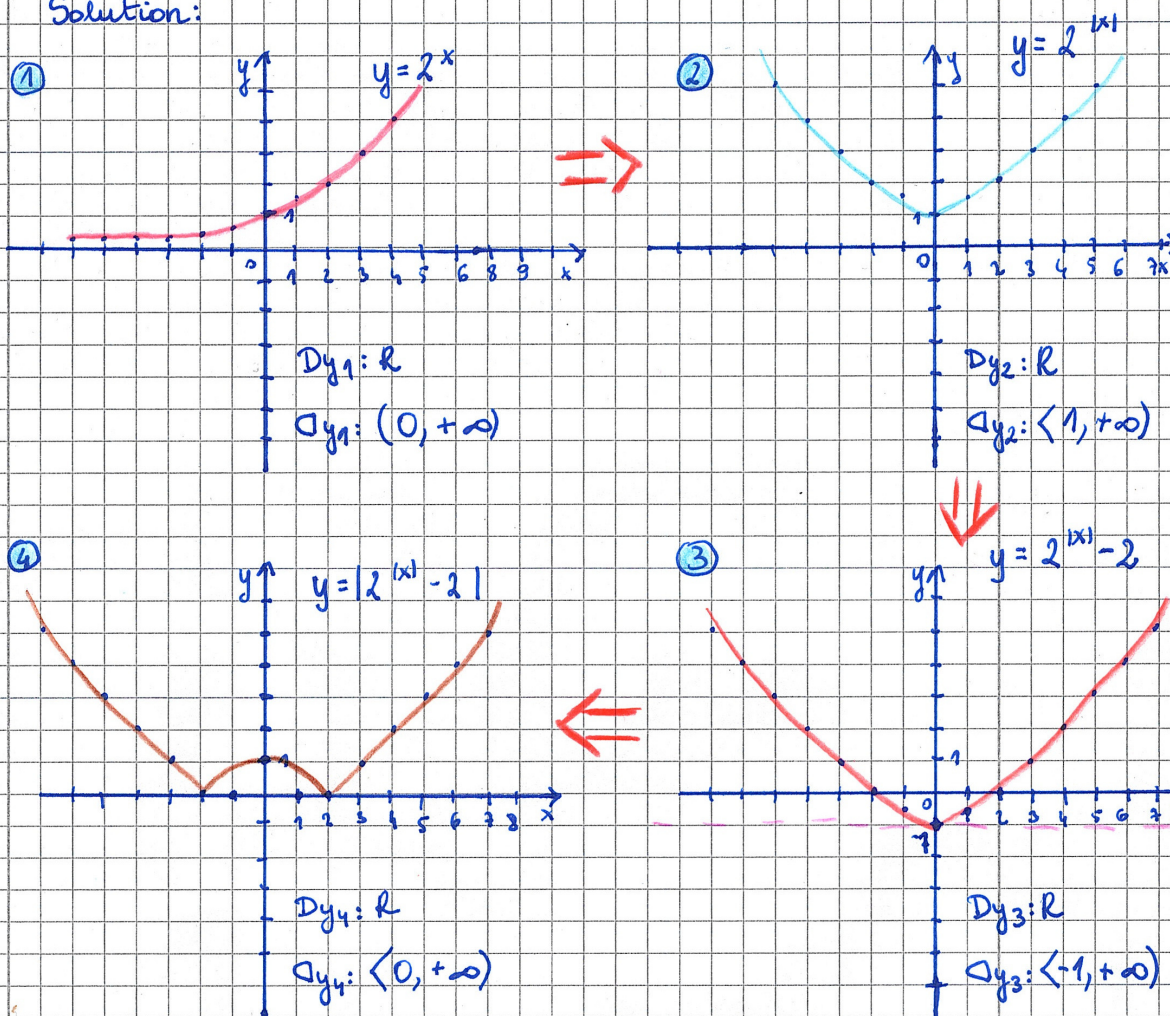


- ① I start with a logarithm of x with base 2,
- ② then I draw the graph with x in the absolute value, so right-hand side remains and left-hand side is a mirror image of right-hand side,
- ③ then, I move previous graph by 1 to the right.
- ④ To obtain the absolute value, the negative part of the previous graph goes up.

What to say in front of the blackboard - a brief tutorial

Exercise: Draw the graph of $y = |2^{|x|} - 2|$. State the domain and co-domain of each function.

Solution:



- ① I start with an exponential function $\rightarrow 2$ to the power of x ,
- ② then, I draw a graph with x in the absolute value, so right-hand side remains and left-hand side is the mirror image of right-hand side,
- ③ then, I move my previous graph down by 2 units.
- ④ The down part (under zero) is reflected up.