Drawing piecewise functions

Task. Draw a graph of the piecewise function defined below.

1.

$$f(x)=\begin{cases}\log_{\frac{1}{2}}(x) & \text{for } x\in(0,1)\\ \log_2(x) & \text{for } x\in[1,8)\end{cases}$$

2.

$$f(x)=\begin{cases}\left(\frac{1}{2}\right)^x & \text{for } x\in(-2,0)\\ 2^x & \text{for } x\in[0,1]\end{cases}$$

3.

$$f(x)=\begin{cases}x^2 & \text{for } x\in(-2,1)\\ \frac{1}{x} & \text{for } x\in[1,2]\end{cases}$$

4.

$$f(x)=\begin{cases}x^2 & \text{for } x\in(-2,0)\\ \sqrt{x} & \text{for } x\in[0,4]\end{cases}$$

5.

$$f(x)=\begin{cases}2^x & \text{for } x\in(-2,0)\\ \log_2(x) & \text{for } x\in(0,4]\end{cases}$$

6.

$$f(x)=\begin{cases}\log_2(x) & \text{for } x\in(0,1)\\ \log_{\frac{1}{2}}(x) & \text{for } x\in[1,8)\end{cases}$$

7.

$$f(x)=\begin{cases}x^3 & \text{for } x\in(-1,1)\\ 1 & \text{for } x\in[1,5)\end{cases}$$

8.

$$f(x)=\begin{cases}0 & \text{for } x\in\{-3,-2,-1\}\\ \sqrt{x} & \text{for } x\in[0,4)\end{cases}$$