The graph of a function $\boldsymbol{f}$ is shown in the accompanying figure.

a) Sketch the graph of the following equation $\boldsymbol{f}(|\boldsymbol{x}|)$.
b) Explain geometrically and algebraically that the graph and the formula of $\boldsymbol{f}(|\boldsymbol{x}|)$ are identical to those of $\boldsymbol{h}$, respectively.


$$
h(x)= \begin{cases}x+3 & :-3 \leq x \leq-2 \\ -x-1 & :-2<x \leq 0 \\ x-1 & : 0<x \leq 2 \\ -x+3 & : 2<x \leq 3\end{cases}
$$

