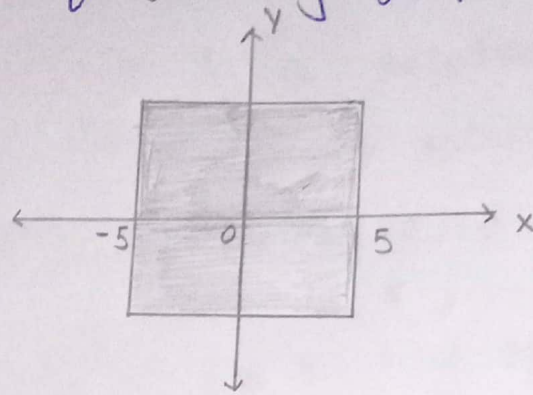


1. The inequality of following graph is :-



Sol \Rightarrow Check if the graph is bounded at end points or not.
If not, then the end point is not included and an open interval should be used.

If the inequality is of the form $-a < x < a$; $a \in \mathbb{R}^+$, then
we use $|x| < a$

In the given graph of x ranges from -5 to 5 .

The graph is not bounded that means the values -5 & 5 are not included. Therefore, open interval will be used.

$$\Rightarrow -5 < x < 5$$

$$\Rightarrow |x| < 5$$