Compound Inequalities – Interpreting

"and" *or* "or" statements

The double inequality is described as $1 < x \leq 8$, is read from the middle to the left, then middle to the right.

To say it correctly, we say x greater than 1 and less than or equal to 8. In common language, we say that x is between 1 and 8, including 8.

Or statements are written as two statements joined by "or" $X < 1$ or $x \geq 8$, that's read as written.