Piecewise Functions

Conventions:

Solid disk corresponds to inclusion of the point or any of $\leq > =$ operators

Hollow disk corresponds to the exclusion or any of the < > operators

Example 1.

$$\begin{cases} 2r+1 & 1 < r \le 3 \\ -2r-1 & 3 < r \le 4 \end{cases}$$