## Inequality Symbols Notes

## important information

$<$ less than
$\leq$ less than or equal to
$>$ greater than
$\geq$ greater than or equal to
$\square$ open circle- does NOT include the number (used on number lines for < and/or > )

- closed circle- does include the number (used on number lines for $\leq$ and/or $\geq$ )
boundary point- the starting and/or stopping point of an inequality.


## Example:

Inequalities can have multiple steps. Use the inequality sign like an equal sign and solve the inequality.

$$
\begin{aligned}
45+2 b & >61 \\
\frac{-45}{2 b} & >\frac{-45}{16} \\
\frac{2 b}{2} & >\frac{16}{2} \\
b & >8
\end{aligned}
$$



Things to Remember

$$
x \geq-2
$$



$$
x<3
$$

Another Example:
Write your own examples.
One problem should be a written inequality and then graph it on a number line.

The second example should be a number line with an inequality graphed on it. Then write the inequality of the graphed number line.

