

## 1.6 Compound Inequalities Absolute Value Inequalities

Compound Inequality: 2 inequalities joined by *and* or *or*. To solve a compound inequality, you must solve each part of it.

and: the intersection of the solution sets

Ex:  $10y \leq 3y - 2 < 19$



or: the union of the solution sets

Ex:  $x + 3 < 2$  or  $-x \leq -4$

Absolute Value Inequality *and*

< means *and*

Ex:  $|g + 4| \leq 9$

Absolute Value Inequality *or*

> means *or*

Ex:  $|2x - 2| \geq 4$

Ex:  $|w| > -2$

Solve:  $x + 3 < 2$  or  $-x \leq -4$

