Date _____ Period ____

$$|3x - 9| = 12$$

Steps to Solve an Absolute Value Equations

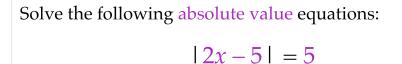
- 1. Isolate absolute value expression
- 2. Create two equations

$$|x| = a$$

$$x = a$$

$$x = -a$$

- 3. Solve both equations
- 4. Check both solutions



Solve the following absolute value equations:

$$3 \mid 2x - 11 \mid + 2 = 29$$

Solve the following absolute value equations:

$$|x-3| = 2x + 9$$

Steps to Solve an Absolute Value Equations

- 1. Isolate absolute value expression
- 2. Create two equations

$$|x| = a$$

$$x = a$$

$$x = -a$$

- 3. Solve both equations
- 4. Check both solutions