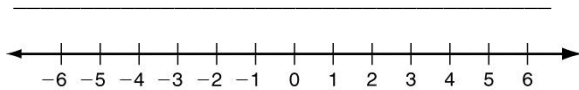


**Show all your steps on your own sheet of paper.**

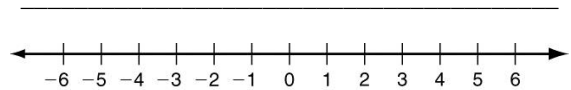
***Solving Absolute-Value Inequalities***

Solve each inequality and graph the solutions.

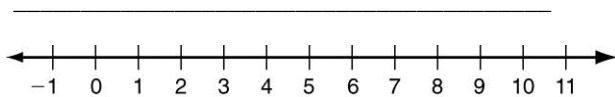
1.  $|x| - 2 \leq 3$



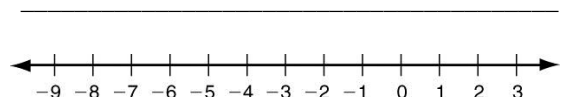
2.  $|x + 1| + 5 < 7$



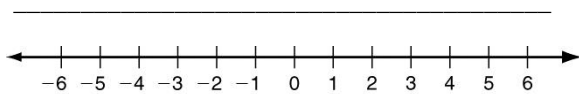
3.  $3|x - 6| \leq 9$



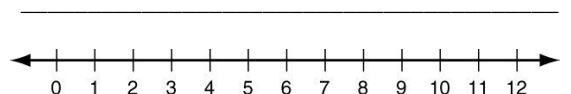
4.  $|x + 3| - 1.5 < -2.5$



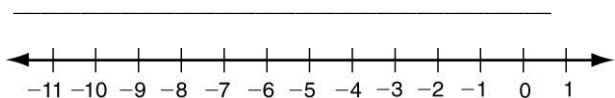
5.  $|x| + 17 > 20$



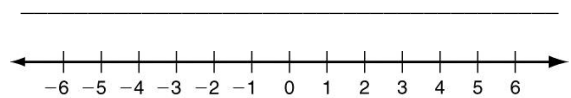
6.  $|x - 6| - 7 > -3$



7.  $\frac{1}{2}|x + 5| \geq 2$



8.  $2|x - 2| \geq 3$



9. The organizers of a drama club wanted to sell 350 tickets to their show. The actual sales were no more than 35 tickets from this goal. Write and solve an absolute-value inequality to find the range of the number of tickets that may have been sold.

10. The temperature at noon in Los Angeles on a summer day was 88 °F. During the day, the temperature varied from this by as much as 7.5 °F. Write and solve an absolute-value inequality to find the range of possible temperatures for that day.