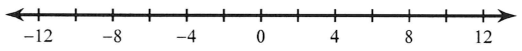
Alg Name_____

2-11 Inequalities With Absolute Value_hw

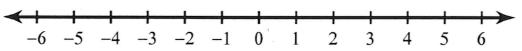
Date_____ Period____

Solve each inequality and graph its solution.

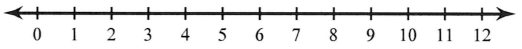
1) $|x| \geq 7$



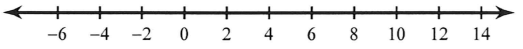
2) $|n| < 5$



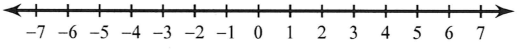
3) $|b - 6| > 3$



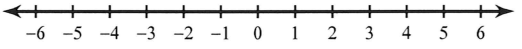
4) $|-4 + n| \leq 8$



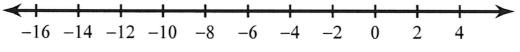
5) $3 + 3\left|\frac{n}{5}\right| < 6$



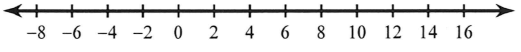
6) $4\left|\frac{k}{2}\right| - 3 > -1$



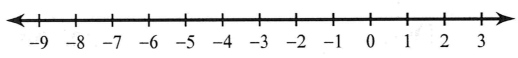
7) $|-5 - x| \geq 7$



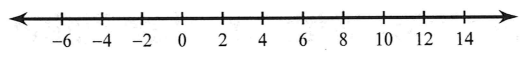
8) $|4 - n| \leq 10$



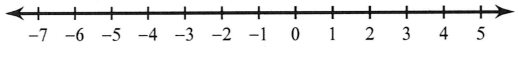
9) $3\left|3+x\right|+4\le 13$



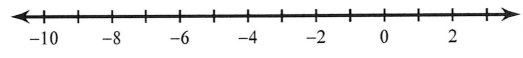
10) $-1-4\left|p-4\right|\le -25$



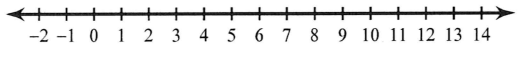
11) $-2\left|-4v\right|+2\ge -22$



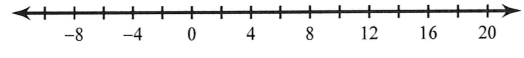
12) $2\left|3+n\right|-2\ge 2$



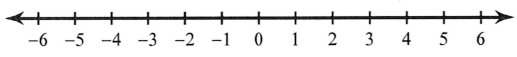
13) $4+5\left|5-x\right|<34$



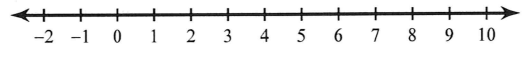
14) $5-\left|5-a\right|<-5$



15) $4\left|1-r\right|-3\ge 1$

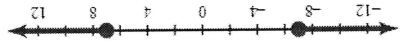


16) $4\left|2-x\right|-5\le 3$

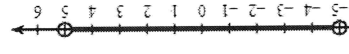


Answers to 2-11 Inequalities With Absolute Value_hw

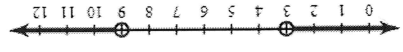
1) $x\ge 7$ or $x\le -7$:



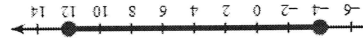
2) $-5<n<5$:



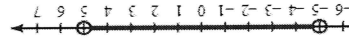
3) $b>9$ or $b<3$:



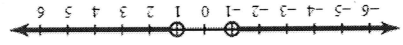
4) $-4\le n\le 12$:



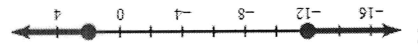
5) $-5<n<5$:



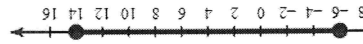
6) $k>1$ or $k<-1$:



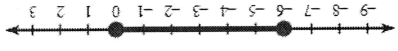
7) $x\le -12$ or $x\ge 2$:



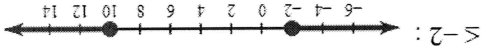
8) $-6\le n\le 14$:



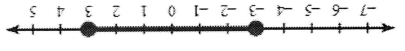
9) $-6\le x\le 0$:



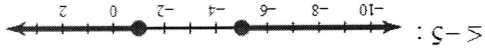
10) $p\ge 10$ or $p\le -2$:



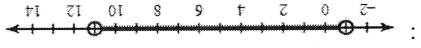
11) $-3\le v\le 3$:



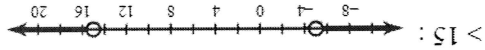
12) $n\ge -1$ or $n\le -5$:



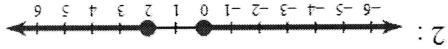
13) $-1<x<11$:



14) $a<-5$ or $a>15$:



15) $r\le 0$ or $r\ge 2$:



16) $0\le x\le 4$: