

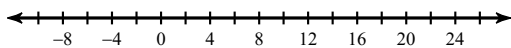
# Absolute Value Inequalities

Name \_\_\_\_\_

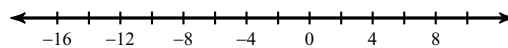
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Solve each inequality and graph its solution.

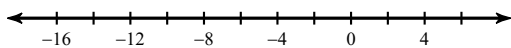
1)  $|x - 8| < 15$



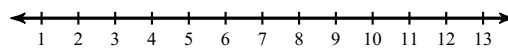
2)  $|x + 2| < 12$



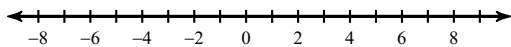
3)  $|v + 5| \leq 10$



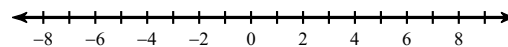
4)  $|-7 + v| \leq 4$



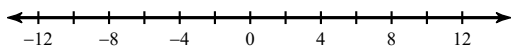
5)  $|-x + 1| \leq 7$



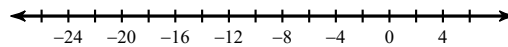
6)  $|9x - 1| \geq 46$



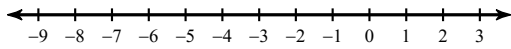
7)  $|-8n + 8| < 88$



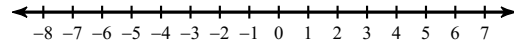
8)  $|r + 9| \leq 14$



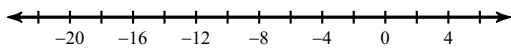
$$9) \frac{|9b|}{2} \leq 4$$



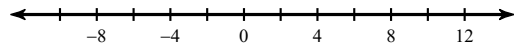
$$10) |4n| + 6 > 22$$



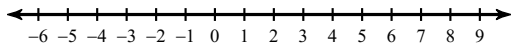
$$11) \frac{|x+9|}{3} \leq 4$$



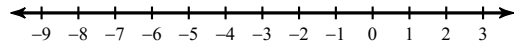
$$12) 8 + |-2k| < 28$$



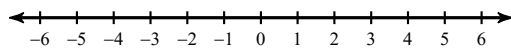
$$13) -2 + |10p - 6| < 62$$



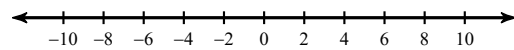
$$14) 4|7 + 7r| \leq 28$$



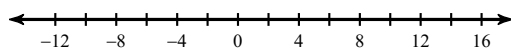
$$15) 10|8x + 2| \geq 100$$



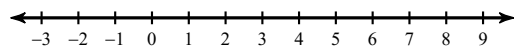
$$16) 2|5 - 9n| \geq 118$$



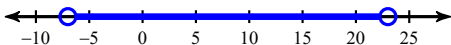
$$17) |8 - 10b| - 7 > 101$$

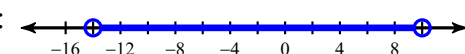


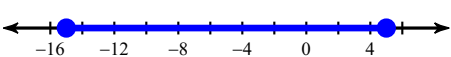
$$18) 5|5 - 5p| + 3 \leq 28$$

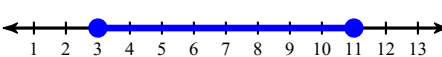


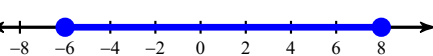
## Answers to Absolute Value Inequalities

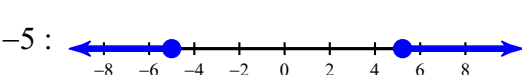
1)  $-7 < x < 23$  : 

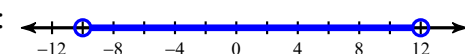
2)  $-14 < x < 10$  : 

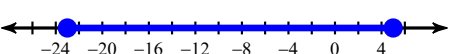
3)  $-15 \leq v \leq 5$  : 

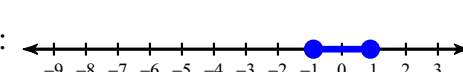
4)  $3 \leq v \leq 11$  : 

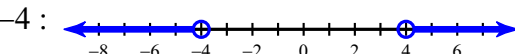
5)  $-6 \leq x \leq 8$  : 

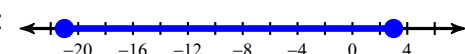
6)  $x \geq \frac{47}{9}$  or  $x \leq -5$  : 

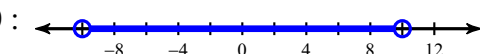
7)  $-10 < n < 12$  : 

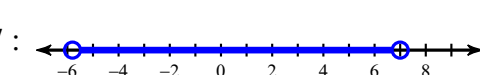
8)  $-23 \leq r \leq 5$  : 

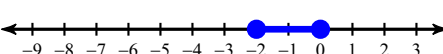
9)  $-\frac{8}{9} \leq b \leq \frac{8}{9}$  : 

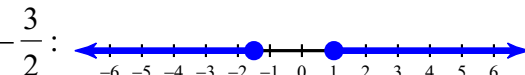
10)  $n > 4$  or  $n < -4$  : 

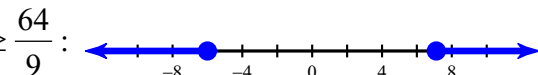
11)  $-21 \leq x \leq 3$  : 

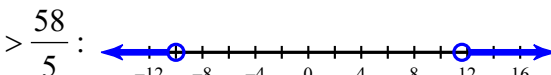
12)  $-10 < k < 10$  : 

13)  $-\frac{29}{5} < p < 7$  : 

14)  $-2 \leq r \leq 0$  : 

15)  $x \geq 1$  or  $x \leq -\frac{3}{2}$  : 

16)  $n \leq -6$  or  $n \geq \frac{64}{9}$  : 

17)  $b < -10$  or  $b > \frac{58}{5}$  : 

18)  $0 \leq p \leq 2$  : 