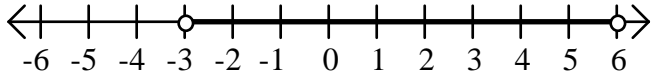


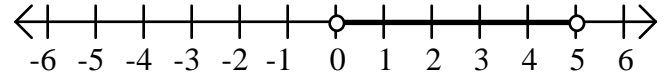
## Algebra I Worksheet #8 Unit 4 selected solutions

Solve each of the following. Graph the solution set on the number line provided.

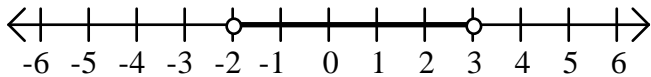
2.  $-9 < 2x - 3 < 9$   
 $-6 < 2x < 12$   
 $-3 < x < 6$



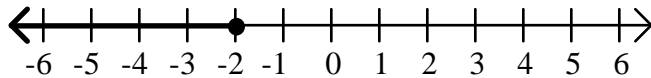
4.  $-10 < 5 - 3x < 5$   
 $-15 < -3x < 0$   
 $5 > x > 0$   
 $0 < x < 5$



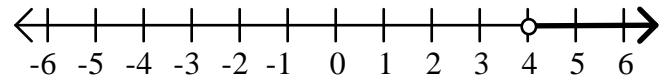
6.  $-11 < 8x + 5 < 29$   
 $-16 < 8x < 24$   
 $-2 < x < 3$



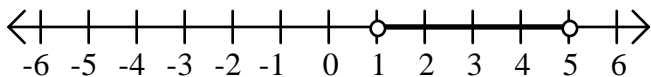
8.  $3x + 1 \leq 10$  and  $-2x + 3 \geq 7$   
 $3x \leq 9$                        $-2x \geq 4$   
 $x \leq 3$                       and                       $x \leq -2$   
 $x \leq -2$



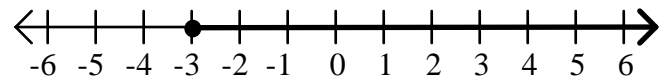
10.  $-2x + 9 < 1$  and  $3x + 9 > 0$   
 $-2x < -8$                        $3x > -9$   
 $x > 4$                       and                       $x > -3$   
 $x > 4$



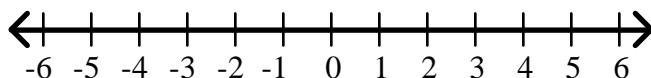
12.  $5 - 3x < 2$  and  $2x - 9 < 1$   
 $-3x < -3$                        $2x < 10$   
 $x > 1$                       and                       $x < 5$   
 $1 < x < 5$



14.  $6x - 7 \geq 17$  or  $-3x + 2 \leq 11$   
 $6x \geq 24$                        $-3x \leq 9$   
 $x \geq 4$                       or                       $x \geq -3$   
 $x \geq -3$



16.  $2x - 3 < 7$  or  $5x + 7 > 2$   
 $2x < 10$                        $5x > -5$   
 $x < 5$                       or                       $x > -1$   
 $x$  can be any number.



18.  $3x + 6 \leq 6$  or  $4x - 6 \geq 6$   
 $3x \leq 0$                        $4x \geq 12$   
 $x \leq 0$                       or                       $x \geq 3$

