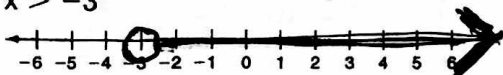


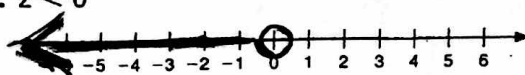
**LESSON 3-6 Practice A**  
**Solving Compound Inequalities**

Graph each inequality, and then graph the compound inequality.

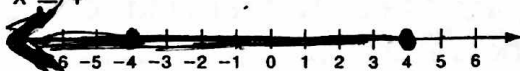
1.  $x > -3$



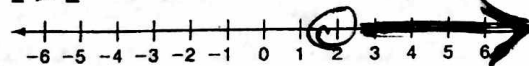
2.  $z < 0$



$x \leq 4$

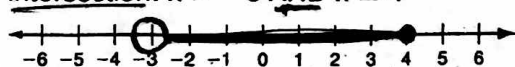


$z > 2$

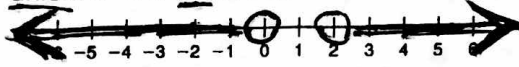


*compound inequality*

intersection:  $x > -3$  AND  $x \leq 4$

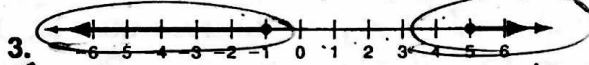


union:  $z < 0$  OR  $z > 2$

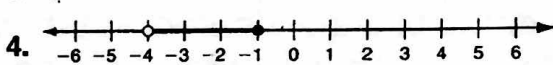


$-3 < x \leq 4$

Write the compound inequality shown by each graph.



$x \leq -1$  or  $x \geq 5$

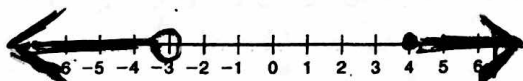


$-4 < x < -1$

Fill in the blanks to solve each compound inequality. Graph the solutions.

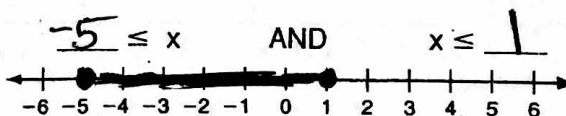
5.  $n + 5 < 2$  OR  $n + 5 \geq 9$

$\frac{n + 5}{-5} < \frac{2}{-5}$  OR  $\frac{n + 5}{-5} \geq \frac{9}{-5}$   
 $n < -3$  OR  $n \geq 4$



6.  $-11 \leq 2x - 1 \leq 1$

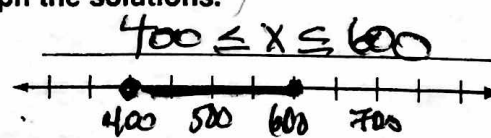
$-11 \leq 2x - 1$  AND  $2x - 1 \leq 1$   
 $+1$   $+1$   
 $-10 \leq 2x$  AND  $2x \leq 2$   
 $\div 2$   $\div 2$   
 $-5 \leq x$  AND  $x \leq 1$



*\*When dividing by a negative number, flip the inequality sign.*

Write a compound inequality for each problem. Graph the solutions.

7. To relieve arthritis, Dr. Stoll recommends taking between 400 and 600 mg of ibuprofen, inclusive.



8. An advertisement for a part-time job says that the hourly rate is between \$6.40 and \$9.80 inclusive, depending on experience.

$6.40 \leq x \leq 9.80$