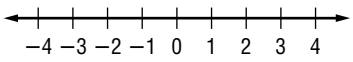
NAME _____ DATE _____ PERIOD _____

6-4 Skills Practice

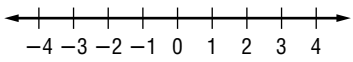
Solving Compound Inequalities

Graph the solution set of each compound inequality.

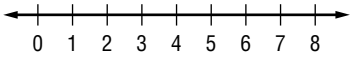
1. $b > 3$ or $b \leq 0$



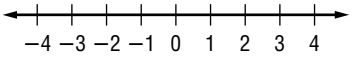
2. $z \leq 3$ and $z \geq -2$



3. $k > 1$ and $k > 5$

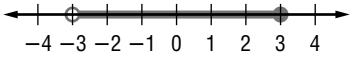


4. $y < -1$ or $y \geq 1$

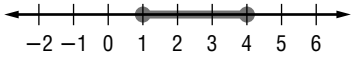


Write a compound inequality for each graph.

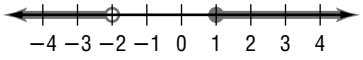
5.



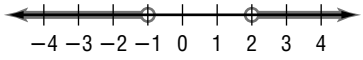
6.



7.

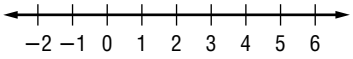


8.

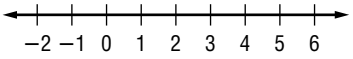


Solve each compound inequality. Then graph the solution set.

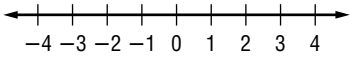
9. $m + 3 \geq 5$ and $m + 3 < 7$



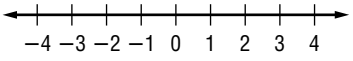
10. $y - 5 < -4$ or $y - 5 \geq 1$



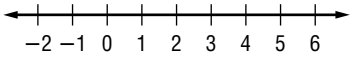
11. $4 < f + 6$ and $f + 6 < 5$



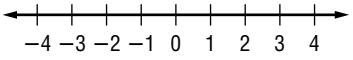
12. $w + 3 \leq 0$ or $w + 7 \geq 9$



13. $-6 < b - 4 < 2$



14. $p - 2 \leq -2$ or $p - 2 > 1$



Define a variable, write an inequality, and solve each problem. Then check your solution.

15. A number plus one is greater than negative five and less than three.

16. A number decreased by two is at most four or at least nine.

17. The sum of a number and three is no more than eight or is more than twelve.

Lesson 6-4