

# Practice 4-5

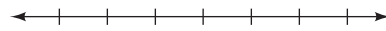
## Compound Inequalities

Solve each compound inequality and graph the solution.

1.  $-5 < s + 5 < 5$



2.  $1 < 3x + 4 < 10$



3.  $k - 3 > 1$  or  $k - 3 < -1$



4.  $b - 2 > 18$  or  $3b < 54$



5.  $-4d > 8$  and  $2d > -6$



6.  $-4 < t + 2 < 4$



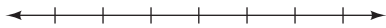
7.  $-3 < 3 + s < 7$



8.  $3j \geq 6$  or  $3j \leq -6$



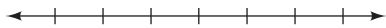
9.  $-1 < \frac{1}{2}x < 1$



10.  $g + 2 > -1$  or  $g - 6 < -9$



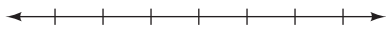
11.  $-6 < 9 + 3y < 6$



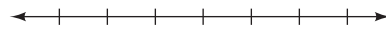
12.  $3f > 15$  or  $2f < -4$



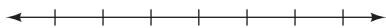
13.  $d - 3 > 4$  or  $d - 3 < -4$



14.  $1 > 2h + 3 > -1$



15.  $7 + 2a > 9$  or  $-4a > 8$



16.  $2z > 2.1$  or  $3z < -5.85$



17.  $c - 1 \geq 2$  or  $c - 1 \leq -2$



18.  $h + 2.8 < 1.8$  or  $h + 2.8 > 4.8$



Write and solve a compound inequality that represents each situation.

Graph your solution.

19. The crowd that heard the President speak was estimated to be 10,000 people. The actual crowd could be 750 people more or less than this. What are the possible values for the actual crowd size?

20. Susie has designed an exercise program for herself. One part of the program requires her to walk between 25 and 30 miles each week. She plans to walk the same distance each day five days a week. What is the range of miles that she should walk each day?

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