

Name: \_\_\_\_\_

Period: \_\_\_\_\_ Date: \_\_\_\_\_

## Compound Inequalities

### Section I. Graph the compound inequality

1.  $3 < x \leq 12$



2.  $-15 \leq x \leq -6$



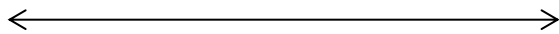
3.  $x \leq 4$  or  $x > 9$



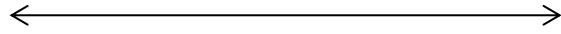
4.  $x < -8$  or  $-2 \leq x$



5.  $-15 \leq x < 7$

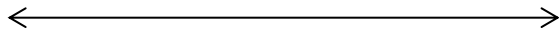


6.  $x \leq -5$  or  $4 \leq x$

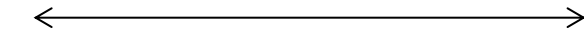


### Section II. Solve for the variable and graph the solution

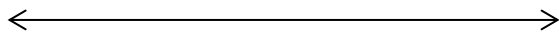
7.  $-13 \leq 2 + x < 12$



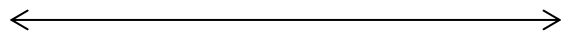
8.  $6 < -3x < 18$



9.  $8x - 11 < 5$  or  $4x - 7 > 13$

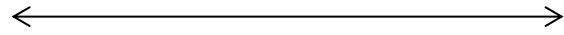
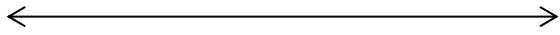


10.  $-8 \leq 2x - 5 < 9$



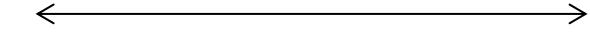
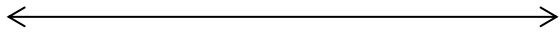
11.  $x - 2 > 8$  or  $x + 1 \leq 7$

12.  $-12 < 2 - x \leq 12$



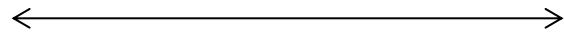
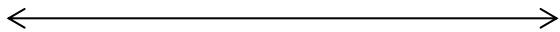
13.  $-\frac{1}{2}x < -3$  or  $2x \leq -12$

14.  $-5 \leq -3x - 4 \leq 17$



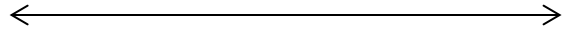
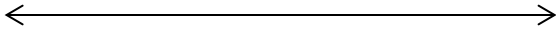
15.  $21 \leq 6x + 9$  or  $9x - 5 \leq 4$

16.  $-12 < 2(x + 4) < 8$



17.  $-1 \leq \frac{2x-5}{3} < 11$

18.  $-3(x+1) > 12$  or  $\frac{(x-2)}{-4} > 4$



19.  $-4 < \frac{2}{3}x - 8 \leq 10$

20.  $-6 < \frac{-4}{5}x + 6 < 24$

