

# Solving Multi-Step Inequalities Assignment

Solve each inequality.

1.  $2x + 7 > -15$

2.  $-6 \leq 8a - 14$

3.  $7 \geq \frac{9}{4}y + 1$

4.  $-8 + 7x < 20$

5.  $-3a - 0.2 \geq 0.7$

6.  $-3 - \frac{y}{6} < 4$

7.  $8x + 7 < 23$

8.  $-2a + 10 \geq 15$

9.  $\frac{2}{3}y + 5 \geq 11$

10.  $4x + 12 \leq 3(2x + 3)$

11.  $-3x + 5 < 4(3x - 10)$

12.  $-3x + 7 > 2(4x + 6)$

13.  $-5(4x + 6) < 7x - 12$

14.  $13x + 16 \leq 25 + 10x$

15.  $\frac{4x + 9}{3} < 11$

16.  $19x + 15 \leq 24 + 10x$

17.  $\frac{3x - 4}{5} \geq 7$

18.  $31x - 14 \geq 13x + 67$

19.  $\frac{4a + 6}{5} \geq 3a$

Write, solve and graph each inequality.

20. One third of a number decreased by five is at least three.



21. Two thirds of a number plus eight is greater than twelve.

