

Name _____

Study the box below. Solve each inequality in the space provided.

Rule:

Solve inequalities with combined operations in the same way that you would solve an equation. Remember to reverse the sign of the inequality when multiplying or dividing by a negative number.

Graph each inequality.

Example:

$$-16 + 3a > -5a$$

$$-16 > -8a$$

$$2 < a$$

$$a > 2$$

Any number greater than 2 is a solution.

1. $10 - 2y \leq -2$

7. $\frac{a}{-20} > -3.7$

13. $13 \geq 3y - 5$

2. $-2 \geq -3x - 4$

8. $\frac{c}{5} + 26 \geq 51$

14. $7 + 8y > 39$

3. $2h + 1 < 13$

9. $\frac{a}{-2} - 9 \leq 11$

15. $4 \leq 2(x - 6)$

4. $48 > -7m + 6$

10. $-21 \geq 3(b + 5)$

16. $10y - 5 > 4y - 3$

5. $4c - 7 > 21$

11. $-2(n - 4) \leq 10$

17. $-12m + 40 \leq 9m - 2$

6. $21 - 4x \leq 29$

12. $3 - 9x \leq 30$

18. $5c - 21 < 11c + 9$