

Name _____

Date _____

Practice Set 2.6
Solving Linear Inequalities

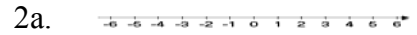
(a) Graph the solutions of each inequality on a number line and then (b) express the solution set of each inequality in interval notation.

1. $x \geq -4$



b. _____

2. $x < 2$



b. _____

3. $x > 3$



b. _____

4. $x \leq \frac{1}{2}$



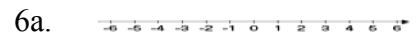
b. _____

5. $-2 < x \leq 4$



b. _____

6. $0 \leq x \leq 3$



b. _____

Use the addition property of inequality to solve each inequality. (a) Graph the solutions of each inequality on a number line and then (b) express the solution set of each inequality in interval notation.

7. $x + 4 > 7$

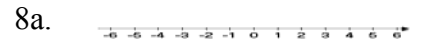


b. _____

Name _____

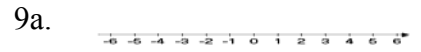
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8. $x - 3 \leq 2$



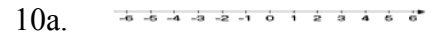
b. _____

9. $4x + 9 > 3x + 4$



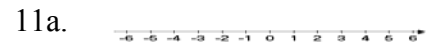
b. _____

10. $x + \frac{1}{2} < \frac{1}{8}$



b. _____

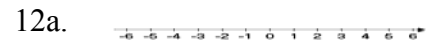
11. $4x + 2 \geq 3 + 3x$



b. _____

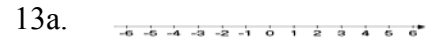
Use the multiplication property of inequality to solve each inequality. (a) Graph the solutions of each inequality on a number line and then (b) express the solution set of each inequality in interval notation.

12. $\frac{1}{2}x > -2$



b. _____

13. $\frac{x}{4} \leq 1$



b. _____

14. $3x \geq 9$



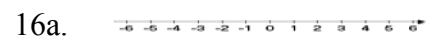
b. _____

15. $-4x < -12$



b. _____

16. $-x \geq 3$



b. _____

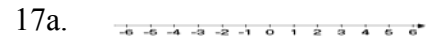
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Use both the addition and multiplication properties of inequality to solve each inequality.

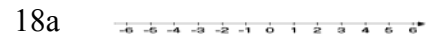
(a) Graph the solutions of each inequality on a number line and then (b) express the solution set of each inequality in interval notation.

17. $-(x + 6) > -5$



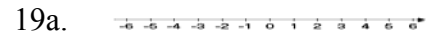
b. _____

18. $2(4x + 1) \leq -6$



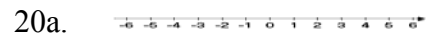
b. _____

19. $4x + 9 > 2x + 3$



b. _____

20. $6(x - 4) \geq 3(x - 5)$



b. _____

Solve each inequality.

21. $6x < 4 + 6x$

21. _____

22. $2x \geq 2x + 6$

22. _____