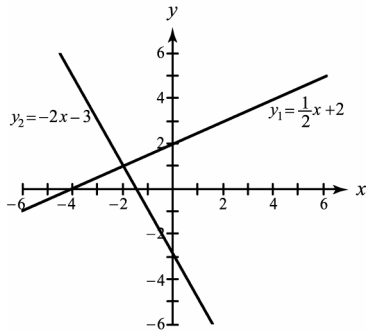


1. Solve $-3x + 5 = -7$. Check your answer.

1. _____

For #2 and #3, use the accompanying graph to solve the equation and inequality.



2. Solve $y_1 = y_2$.

2. _____

3. Solve $y_1 \geq y_2$. Write your answer in interval notation.

3. _____

4. Solve $3x + 2 = -2x + 2$ graphically.

4. _____

5. Solve $3 + 4(x - 2) = 3x + 1$.

5. _____

6. Translate the sentence into an equation and then solve.
 "If -4 is added to 2 times x , it equals x plus 1."

6. _____

7. Solve $4x + 2y = 9$ for y . Let $y = f(x)$ and write a formula for $f(x)$.

7. _____

8. Solve the inequality $4 - \frac{1}{2}x > x + 1$. Write your answer in interval notation.

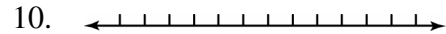
8. _____

9. Solve the inequality $2 - 3(x + 4) \geq 2x - 1$. Write your answer in interval notation.

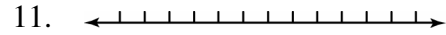
9. _____

In #10 and #11, graph the solution set to the compound inequality on a number line.

10. Solve $3x - 1 \leq 4$ and $2x > x - 3$.



11. Solve $2x \leq x - 1$ or $2x + 3 > 7$.

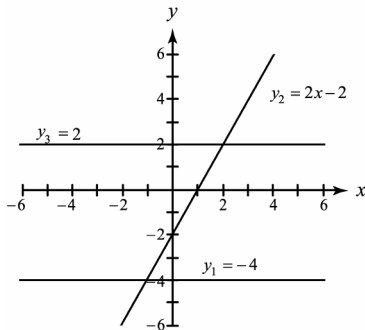


12. Use the table to solve the compound inequality $2 < 2x \leq 6$.
Write your answer in interval notation.

12. _____

x	-3	-2	-1	0	1	2	3
$2x$	-6	-4	-2	0	2	4	6

For #13 and #14, use the following figure to solve the equation and inequality.



13. Solve $y_1 = y_2$.

13. _____

14. Solve $y_2 \leq y_3$. Write your answer in interval notation.

14. _____

In #15 and #16, solve the compound inequality and write the solution set in interval notation.

15. Solve $-2 \leq 4 - \frac{1}{3}x < 3$.

15. _____

16. Solve $2 - \frac{2}{3}x \leq -4$ or $2 - \frac{2}{3}x > -1$.

16. _____

17. Solve $|2 + 3x| = 5$.

17. _____

18. Solve $|2 - 5x| \geq -3$. Write your answer in interval notation.

18. _____

19. Solve $|1 - 2x| + 3 > 5$. Write your answer in interval notation.

19. _____

20. Solve the formula $A = 2\pi rh$ for r .

20. _____