



4. Solve the equation:  $2(x + 5) = 3(x + 8) - 6$

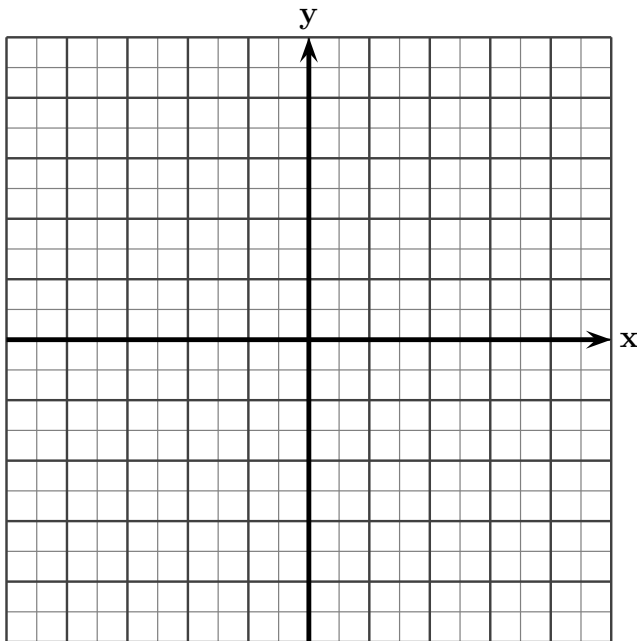
5. Solve the equation:  $\frac{5x + 3}{9} - \frac{3 - x}{3} = x - 1$

6. Solve the inequality:  $-5x + 2 > 11$ . Graph the solution set and give your answer in interval notation.

7. Solve for  $y$ :  $3x - 5y = 15$

8. Find the slope and the two intercepts of the line with equation  $-7x + 3y = -42$ .

9. Sketch the graph of  $4x + 3y = 12$ . Show the  $x$  and  $y$  intercepts.



10. Find the equation of the line that passes through the points with coordinates  $(-1, -7)$  and  $(1, -1)$ .

11. Find the equation of the line that is parallel to the line with equation  $3x - 2y = 11$  and passes through the point with coordinates  $(2, -5)$ .

12. Find the point where the lines with equations  $y = 5x - 3$  and  $2x - 4y = 48$  intersect.

13. Solve the following system: 
$$\begin{cases} 3x - 5y = 13 \\ 4x + 2y = -26 \end{cases}$$

14. Solve the following system: 
$$\begin{cases} 2x + 3y = -3 \\ 4x + 6y = -6 \end{cases}$$

15. Simplify:  $(3x^4y^3z^5)^2(-2x^3y^4z^2)^3$

16. Simplify:  $(-3x^2 + 4x - 7) - (8x + 3x - 2)$

17. Expand and simplify:  $(2x - 5)(3x^2 - 5x + 7)$

18. Expand and simplify:  $(x - 3)^3$

19. Simplify:  $\frac{10a^5b^3 - 4a^3b^2 + 6a^4b^6 + 8ab^2}{2ab^2}$

20. Simplify:  $\frac{(2x - 3)^2 + 24x}{(2x + 3)^2}$