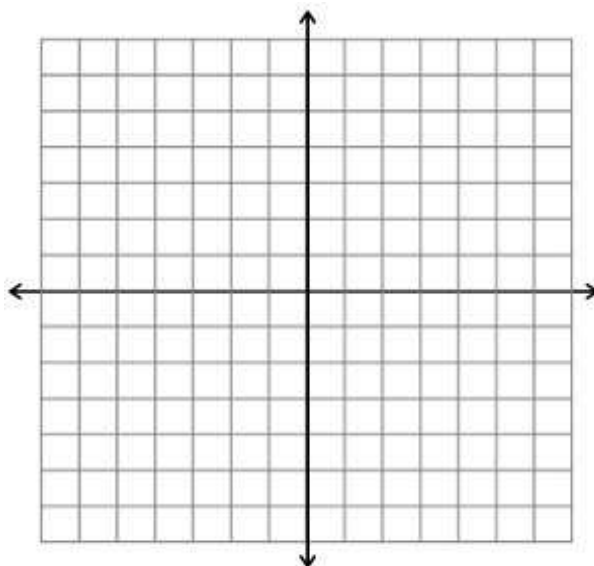


Sections 6.1 and 6.3—Systems of Equations

13. 2×2 Systems A 2×2 system of equations is a system of two equations and two unknowns.

14. Graphical Approach
$$\begin{cases} 3x + 2y = 11 \\ -x + y = 3 \end{cases}$$



15. Algebraic Approach
$$\begin{cases} 3x + 2y = 11 \\ -x + y = 3 \end{cases}$$

16. Some Terminology Consistency

17. Matrix Approach
$$\begin{cases} 3x + 2y &= 11 \\ -x + y &= 3 \end{cases}$$

18. Example
$$\begin{cases} 3x - y &= 4 \\ x + y &= 0 \end{cases}$$

19. Example A 3×3 system:

$$\begin{cases} 4x + 2y - 3z &= 6 \\ x - 4y + z &= -4 \\ -x + 2z &= 2 \end{cases}$$

20. Example Write the system of equations corresponding to the augmented matrix. Do **not** solve the system.

$$\left(\begin{array}{cccc} 4 & -2 & 3 & 4 \\ 3 & 5 & 1 & 7 \\ 5 & -1 & 4 & 7 \end{array} \right)$$