

Key Takeaways

System of linear equations (Cramer's rule):

(iii) If $\Delta = 0$, but at least one of $\Delta_x, \Delta_y, \Delta_z \neq 0$, system of equations is inconsistent and has no solution.

$\Delta \neq 0$		Consistent system	Unique solution
$\Delta = 0$	$\Delta_x = \Delta_y = \Delta_z = 0$	Consistent system	Infinite solution
	at least one of $\Delta_x, \Delta_y, \Delta_z \neq 0$	Inconsistent system	No solution