

Contents

1	Section 3.1	1
1.1	3.1.3	1

1 Section 3.1

1.1 3.1.3

Use the method of elimination to determine whether the given linear system is consistent or inconsistent. If the linear system is consistent, find the solution if it is unique; otherwise, describe the infinite solution set in terms of an arbitrary parameter t .

$$\begin{cases} 7x + 5y = -22 \\ 2x + 9y = 24 \end{cases}$$

$$\begin{cases} x + \frac{5}{7}y = -\frac{22}{7} \\ -x - \frac{9}{2}y = -12 \end{cases}$$

$$-\frac{53}{14}y = -\frac{106}{7}$$

$$y = 4$$

$$7x + 5(4) = -22$$

$$x = -6$$

Unique solution: $x = -6, y = 4$
