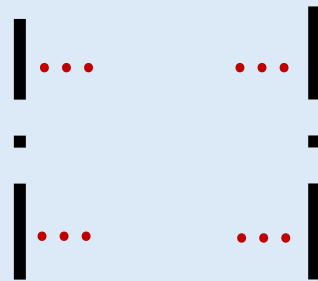


Chapter 6

Algebraic Equations I



Step 3



Step 4

$$\begin{array}{cc} & C1 & C2 \\ R1 & \left| \begin{array}{c} \dots \end{array} \right. & \begin{array}{c} \dots \end{array} \left| \right. \\ & \cdot & \cdot \\ R2 & \left| \begin{array}{c} \dots \end{array} \right. & \begin{array}{c} \dots \end{array} \left| \right. \end{array}$$



Step 5

$$\begin{array}{cc} & (ax & c) \\ R1 & \left| \begin{array}{c} \dots \end{array} \right. & \left. \begin{array}{c} \dots \end{array} \right| \\ & \vdots & \vdots \\ R2 & \left| \begin{array}{c} \dots \end{array} \right. & \left. \begin{array}{c} \dots \end{array} \right| \end{array}$$



Step 6

$$\begin{array}{c}
 (ax \quad c) \\
 R1 \left| \begin{array}{c} m \\ \vdots \end{array} \right. \begin{array}{c} \dots \\ \vdots \end{array} \\
 R2 \left| \begin{array}{c} n \\ \vdots \end{array} \right. \begin{array}{c} \dots \\ \vdots \end{array}
 \end{array}$$



Step 7

$$\begin{array}{c} R1 \\ R2 \end{array} \begin{array}{cc} (ax & c) \\ \left| \begin{array}{cc} m & \lambda \\ \vdots & \vdots \end{array} \right. & \left| \begin{array}{cc} n & \mu \\ \vdots & \vdots \end{array} \right. \end{array}$$

Diagram illustrating a row operation (Step 7) on a matrix. The matrix is partitioned into two rows, $R1$ and $R2$, and two columns, (ax) and (c) . The elements in the matrix are m , λ , n , and μ . A dashed vertical line labeled b is positioned between the two columns. Arrows indicate the operation: m is added to n (indicated by a solid arrow from m to n), and λ is added to μ (indicated by a solid arrow from λ to μ). A dashed line also connects b to the middle of the matrix.



Step 8

$$\begin{array}{cc} (ax & c) \\ \left| \begin{array}{c} m \\ \vdots \\ n \end{array} \right. & \left| \begin{array}{c} \lambda \\ \vdots \\ \mu \end{array} \right. \end{array} \begin{array}{l} R1 \rightarrow mx + \lambda \\ \\ R2 \rightarrow (nx + \mu) \end{array}$$



Thank You

