

```

A = {{3, 4, 6, 7}, {8, 4, 3, 4}, {5, 6, 4, 3}, {4, 2, 3, 4}};
For[k = 1, k ≤ 3, k++,
  For[i = k + 1, i ≤ 4, i++,
    m[i] = -A[[i, k]] / A[[k, k]];
    For[j = 1, j ≤ 4, j++,
      A[[i, j]] = A[[i, j]] + m[i] * A[[k, j]];
    ]
  ]
]
Print[" elimination=", MatrixForm[A]];

```

$$\text{elimination} = \begin{pmatrix} 3 & 4 & 6 & 7 \\ 0 & -\frac{20}{3} & -13 & -\frac{44}{3} \\ 0 & 0 & -\frac{47}{10} & -\frac{36}{5} \\ 0 & 0 & 0 & -\frac{14}{47} \end{pmatrix}$$