

QUESTION

How do I solve systems of linear equations using ROW REDA?



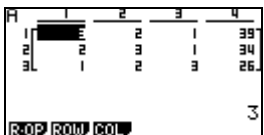


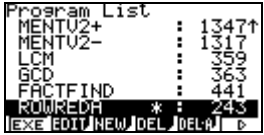
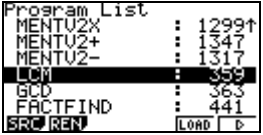
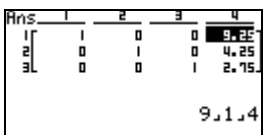
Solve the following system of equations:

$$3x + 2y + z = 39$$

$$2x + 3y + z = 34$$

$$x + 2y + 3z = 26$$

SOLUTION

ACTION	DIAGRAM	COMMENTS
Enter the MAT application  .		
Define Mat A to be a three by four matrix, of the coefficients and constants of the system		Note, for this process to work, the matrix must be defined as Mat A.
Press MENU and enter PRGM mode  .		
Use the arrow keys (▲ , ▼) to scroll through the Program List and find ROWREDA. Press EXE (or F1) to execute program.		If ROWREDA can not be found in the Program List or if the list is empty, press F6 to view other options.  Press F5 to LOAD the Software Library. Select U.S.A. Find ROWREDA and press EXE . The program will then be loaded into the Program List.
ROWREDA will commence row operations on matrix A and will display the result in row echelon form.		For systems without a unique solution, the result matrix will enable you to determine if the system has no solutions or infinitely many solutions. More advanced versions of this program are freely available on the WWW. Such programs will indicate if the system has no solutions or infinitely many solutions.

⚠ Note that if the system of equations being solved has no solutions, or infinitely many solutions, the calculator will return Ma ERROR. It will not tell you which of the cases it is. Row operation will need to be used to determine this.