Solving Matrix Equations Using the Ti-89 Titanium
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We will begin by solving these equations.

\[3x + 4y = 1 \quad \text{Note: the solution is } x = 0.714, \ y = -0.286\]
\[2x - 2y = 2\]

First go to the math menu by pressing \(2^{\text{nd}}, \text{MATH}\).

Then go into Matrix and select the \(\text{rref}()\) Function.

Then type the matrix as shown.

\[
\begin{bmatrix}
3 & 4 & 1 \\
2 & -2 & 2
\end{bmatrix}
\]

Press the Enter button and the answers should appear. This method will also work for 3x3 matrices.

We have successfully solved the set of equations. The solution is:

\[X = 0.714285714286\]
\[Y = -0.285714285714\]