

A-Team Confluence Page

Starting with system of equations:

$$x+2y+10a+0b = 30$$

$$2x+4y+6a+0b = 20$$

$$2x+8y+0a+6b=40$$

We need to find the values for **a** and **b**. Problem is we have three equations and four unknowns.

Write an augmented matrix using the above equations.

$$\left[\begin{array}{cccc|c} 1 & 2 & 10 & 0 & 30 \\ 2 & 4 & 6 & 0 & 20 \\ 2 & 8 & 0 & 6 & 40 \end{array}\right]$$

Begin row-reduction techniques.

$$\left[\begin{array}{cccc|c} 0 & 0 & 7 & 0 & 20 \\ 1 & 2 & 3 & 0 & 10 \\ 2 & 8 & 0 & 6 & 40 \end{array}\right]$$