

**Original matrix**

compute reduced row echelon form (rref) of matrix A below:

Equation	Left Hand Side	Right Hand Side
1	$x_1 + 2x_2 + 3x_3$	1
2	$x_1 + x_2 + 2x_3$	2
3	$x_1 + x_2 + x_3$	3

**Check**

add the missing entries

Equation	Left Hand Side	Right Hand Side	Equation	Left Hand Side	Right Hand Side
			4	$x_1 + 2x_2 + 3x_3$	1
1	$x_1 + 2x_2 + 3x_3$	1			
2	$x_1 + x_2 + 2x_3$	2			
	$x_1 + 2x_2 + 3x_3$	1	5	$x_1 + x_2 + 2x_3$	2
	$x_1 + x_2 + 2x_3$	2			
	$x_1 + x_2 + x_3$	3			
	$x_1 + 2x_2 + 3x_3$	1			
6	$x_1 + 2x_2 + 3x_3$	1			
7	$x_1 + x_2 + 2x_3$	2			
	$x_1 + 2x_2 + 3x_3$	1			
	$x_1 + x_2 + 2x_3$	2			
	$x_1 + 2x_2 + 3x_3$	1			
	$x_1 + x_2 + 2x_3$	2			
	$x_1 + x_2 + x_3$	3			
	$x_1 + 2x_2 + 3x_3$	1			
	$x_1 + x_2 + 2x_3$	2			
	$x_1 + x_2 + x_3$	3			