Gaussian Row

$$\left[\begin{array}{ccccc|c} 1 & 2 & 0 & 0 & 0 & 11 \\ 2 & 7 & 1 & 0 & 0 & 29 \\ 0 & 9 & 5 & 2 & 0 & 33 \\ 0 & 0 & 8 & 11 & 5 & 78 \\ 0 & 0 & 0 & 6 & 12 & 66 \end{array}\right] \quad R_2 - 2R_1$$

$$\left[\begin{array}{ccccc|c} 1 & 2 & 0 & 0 & 0 & 11 \\ 0 & 3 & +1 & 0 & 0 & 7 \\ 0 & 9 & 5 & 2 & 0 & 33 \\ 0 & 0 & 8 & 11 & 5 & 78 \\ 0 & 0 & 0 & 6 & 12 & 66 \end{array}\right] \quad \times 3$$

78
+18

36

1	2	0	0	0	11
0	3	1	0	0	7
0	0	2	2	0	12
0	0	8	11	5	78
0	0	0	6	12	66

× 4

1	2	0	0	0	11
0	3	1	0	0	7
0	0	2	2	0	12
0	0	0	3	5	30
0	0	0	6	12	66

1	2	0	0	0	11
0	3	1	0	0	7
0	0	2	2	0	12
0	0	0	3	5	30

0 0 0 0 2 | 6

$x_4 = 3$

$x_3 = 5$

$x_2 = 1$

$x_1 = 2$

$x_0 = 7$