System of linear equations

$$
\begin{aligned}
6x_1 &- 2x_2 &+ 2x_3 &+ 4x_4 &= 16 \\
12x_1 &- 8x_2 &+ 6x_3 &+ 10x_4 &= 26 \\
3x_1 &- 13x_2 &+ 9x_3 &+ 3x_4 &= -19 \\
-6x_1 &+ 4x_2 &+ x_3 &- 18x_4 &= -34
\end{aligned}
$$

Gaussian elimination

$$\left[\begin{array}{cccc|c} 6 & -2 & 2 & 4 & 16 \\ 12 & -8 & 6 & 10 & 26 \\ 3 & -13 & 9 & 3 & -19 \\ -6 & 4 & 1 & -18 & -34 \end{array}\right]$$

Gaussian elimination

	6	-2	2	4	16
$-2\cdot$	12	-8	6	10	26
$-0.5\cdot$	3	-13	9	3	-19
$+1\cdot$	-6	4	1	-18	-34

Gaussian elimination

	6	-2	2	4	16
$-2\cdot$		-4	2	2	-6
$-0.5\cdot$		-12	8	1	-27
$+1\cdot$		2	3	-14	-18

Gaussian elimination

	6	-2	2	4	16
		-4	2	2	-6
$-3\cdot$		-12	8	1	-27
$+0.5\cdot$		2	3	-14	-18

Gaussian elimination

	6	-2	2	4	16
		-4	2	2	-6
$-3\cdot$			2	-5	-9
$+0.5\cdot$			4	-13	-21

Gaussian elimination

	6	-2	2	4	16
		-4	2	2	-6
			2	-5	-9
$-2\cdot$			4	-13	-21

Gaussian elimination

	6	-2	2	4	16
		-4	2	2	-6
			2	-5	-9
$-2\cdot$				-3	-3

Gaussian elimination

$$
\left[\begin{array}{cccc|c}
6 & -2 & 2 & 4 & 16 \\
 & -4 & 2 & 2 & -6 \\
 & & 2 & -5 & -9 \\
 & & & -3 & -3
\end{array}\right]
$$

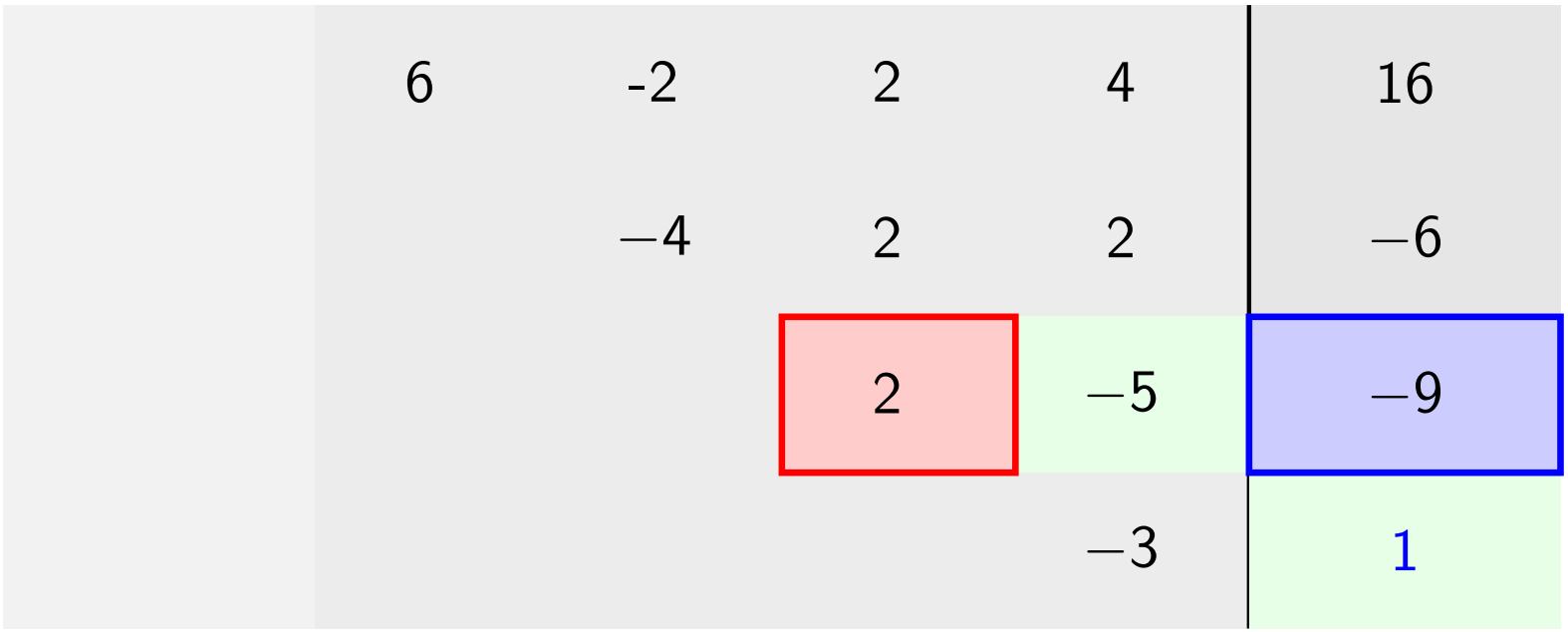
Gaussian elimination

6	-2	2	4	16
	-4	2	2	-6
		2	-5	-9
			-3	-3

Gaussian elimination

$$
\left[\begin{array}{cccc|c}
6 & -2 & 2 & 4 & 16 \\
 & -4 & 2 & 2 & -6 \\
 & & 2 & -5 & -9 \\
 & & & -3 & 1
\end{array}\right]
$$

Gaussian elimination



Gaussian elimination

$$\left[\begin{array}{cccc|c} 6 & -2 & 2 & 4 & 16 \\ & -4 & 2 & 2 & -6 \\ & & 2 & -5 & -2 \\ & & & -3 & 1 \end{array}\right]$$

Gaussian elimination

6	-2	2	4	16
	-4	2	2	-6
		2	-5	-2
			-3	1

Gaussian elimination

$$\left[\begin{array}{cccc|c} 6 & -2 & 2 & 4 & 16 \\ & -4 & 2 & 2 & 1 \\ & & 2 & -5 & -2 \\ & & & -3 & 1 \end{array}\right]$$

Gaussian elimination

6	-2	2	4	16
	-4	2	2	1
		2	-5	-2
			-3	1

Gaussian elimination

$$\left[\begin{array}{cccc|c} 6 & -2 & 2 & 4 & 3 \\ & -4 & 2 & 2 & 1 \\ & & 2 & -5 & -2 \\ & & & -3 & 1 \end{array}\right]$$