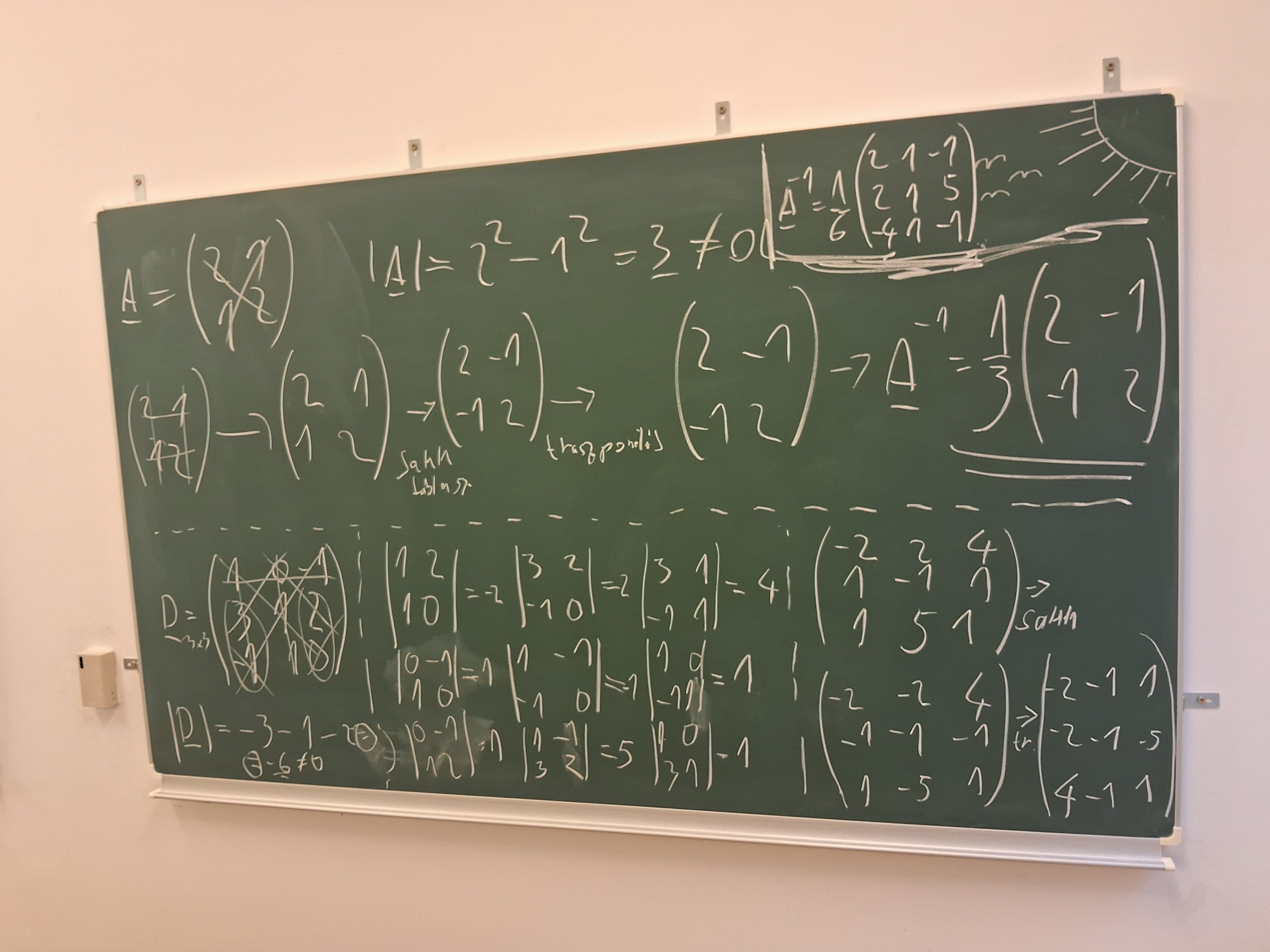
A = (2 1 / 1 2)
|A| = 2² − 1² = 3 ≠ 0
A⁻¹ = 1/6 (2 1 −1 / 2 1 5 / −4 1 −1)
(2 1 / 1 2) → (2 1 / 1 2) → (2 −1 / −1 2)
Sarrus
trasponi
(2 −1 / −1 2) → A⁻¹ = 1/3 (2 −1 / −1 2)
D = (4 0 −1 / 3 1 2 / 1 1 0)
|D| = −3 − 1 − 2 = −6 ≠ 0
|1 2 / 1 0| = −2 |3 2 / −1 0| = 2 |3 1 / −1 1| = 4
|0 −1 / 1 0| = 1 |1 −1 / −1 0| = 1 |1 0 / −1 1| = 1
|0 −1 / 1 2| = 1 |1 −1 / 3 2| = 5 |1 0 / 3 1| = 1
(−2 3 4 / 1 −1 1 / 1 5 1) → Sarrus
(−2 −2 4 / −1 −1 −1 / 1 −5 1) → tr. (−2 −1 1 / −2 −1 −5 / 4 −1 1)

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$$\begin{cases} x_1 - 2x_2 - 3x_3 = 6 \\ 2x_1 - 3x_2 + x_3 = -1 \\ 3x_1 + x_2 + x_3 = 5 \end{cases}$$

$$\begin{vmatrix} 1 & -2 & -3 \\ 2 & -3 & 1 \\ 3 & 1 & 1 \end{vmatrix} = -3 - 6 - 6 - 27 + 4 - 1 = -39$$

$$x_1 - 2x_2 - 3x_3 = 6 \quad (II) - 2(I)$$
$$x_2 + 7x_3 = -13 \quad (III) - 3(I)$$
$$7x_2 + 10x_3 = -13$$

$$\begin{vmatrix} 1 & -2 & -3 \\ 0 & -1 & 7 \\ 0 & 7 & 10 \end{vmatrix} = -78 - 10 + 3 - 45 - 2 - 6 = -78$$

$$x_1 - 2x_2 - 3x_3 = 6$$
$$x_2 + 7x_3 = -13 \quad (III) - (II)7$$
$$-39x_3 = 78 \rightarrow x_3 = -2$$

$$\begin{vmatrix} 1 & -2 & 6 \\ 0 & -1 & 1 \\ 0 & 7 & -13 \end{vmatrix} = -1 + 18 - 30 - 9 - 12 - 5 = -39$$

$x_2 = 1$

$x_1 = 2$

$$\begin{vmatrix} 1 & -2 & 6 \\ 2 & -3 & -1 \\ 3 & 1 & 5 \end{vmatrix} = -15 + 6 + 12 + 54 + 28 + 1 = 78$$

$x_3 = -2$