

Ist Mat I - CIA
Ricaviamo 5/6/23

$$(M, I) \rightarrow (I, M^{-1})$$

M $n \times n$ invertibile ($\det(M) \neq 0$)

M^{-1} ha nel posto (i, j) $\frac{(-1)^{i+j} \cdot \det(M^{ji})}{\det(M)}$

$$M = \begin{pmatrix} 2 & -1 & 4 \\ 3 & 5 & 1 \\ 7 & -2 & -3 \end{pmatrix}$$

$$\det(M) = -30 - 7 - 24 \\ -140 - 9 + 4 = -206$$

$$M^{-1} = \frac{1}{-206} \begin{pmatrix} -13 & -11 & -21 \\ \dots & \dots & \dots \end{pmatrix}$$

$$\int \frac{dx}{\sqrt{x+3}} \quad y = \sqrt{x} \quad y^2 = x \quad 2y dy = dx$$

$$\int \frac{2y dy}{y+3} = \int \frac{2y+6-6}{y+3} dy = \int \left(2 - \frac{6}{y+3} \right) dy \\ = 2y - 6 \log(y+3) + c = 2\sqrt{x} - 6 \log(\sqrt{x+3}) + c$$