



Definition

Consider two $n \times n$ matrices A and B . We say that A is similar to B if there exists an invertible matrix S such that:

$$AS = SB, \text{ or } B = S^{-1}AS$$



Problem

is matrix $A = \begin{pmatrix} 1 & 2 \\ 4 & 3 \end{pmatrix}$ similar to $B = \begin{pmatrix} 5 & 0 \\ 0 & -1 \end{pmatrix}$?



Problem

Compute $(3 + 4i)\left(-2 - \frac{i}{2}\right) - 4 + i$

Compute $\frac{2 - i}{-1 - 3i}$ and then try to plot it