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[> restart : with(LinearAlgebra) : with(plots) : with(plottools) : assume(k,
  'integer') :
[> U := Matrix([[2, 3], [1, 0]]) :
[> J, Q := JordanForm(U, output = ['J', 'Q'])

```

$$J, Q := \begin{bmatrix} -1 & 0 \\ 0 & 3 \end{bmatrix}, \begin{bmatrix} \frac{1}{4} & \frac{3}{4} \\ -\frac{1}{4} & \frac{1}{4} \end{bmatrix} \quad (1)$$

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[> constants := solve(Q • Vector([c1, c2]) = Vector([1, 2]))
      constants := {c1 = -5, c2 = 3}
[>

```

(2)