

```

> restart: with(inttrans) : with(LinearAlgebra) :
> A := Matrix([[0, 0, B, 0, Ex], [1, 0, 0, 0, 0], [-B, 0, 0, 0, Ey], [0, 0, 1, 0, 0], [0, 0,
    0, 0, 0]]):
> y := Vector([vx0, x0, vy0, y0, 1]):
> J, Q := JordanForm(A, output = ['J', 'Q']):
> exp_A := MatrixExponential(A, t):
> res := exp_A • y:
> x := res[2]:
> y := res[4]:
> # ii
> # We doen maar eentje
> A := Matrix([[0, 0, 10, 0, 0], [1, 0, 0, 0, 0], [-10, 0, 0, 0, 0], [0, 0, 1, 0, 0], [0, 0,
    0, 0, 0]]):
> exp_A := MatrixExponential(A, t):
> res := exp_A • Vector([2, -1, 0, 0, 1]):
> x := res[2]:
> y := res[4]:
> plot_1 := plot([x, y, t = 0..5])

```

