

**Problem:** Draw a graph of a solution of the Lorentz model. Lorentz model is defined by the following ordinary differential equation. The Lorentz equation is a system of ordinary differential equation for three unknown functions  $p_1(t), p_2(t), p_3(t)$  of the time  $t$ .

$$\begin{aligned}p_1' &= -ap_1 + ap_2, \\p_2' &= -p_1p_3 + bp_1 - p_2, \\p_3' &= p_1p_2 + cp_3\end{aligned}$$

Here,  $a, b, c$  are parameters given as floating point numbers.

## References