Slope Field App

Quick Start Guide

Use the slope field app to analyze first order ordinary differential equations (ODEs): $rac{dx}{dt} = f(t,x)$

3. Explore Show isoclines using the Analysis menu Draw a solution Select a different ODE from the library Export the field to an image Slope Field App Analysis Solve Draw Appearance Library Custom library Export graphics 2. Solve the ODE Solve from an initial condition by clicking on the field Delete a solution by right-clicking it Highlight a solution curve by left-clicking it 1. Define the ODE x0 = -0.5 Differential equation Finished plotting solution Define the ODE by entering I ' = a*x^2 - t 1.5 Line width an expression -2 xmax 20 🖨 Field density Animation speed Set parameters by entering [] 1 🜲 Field scale Default names and values 4. Tune Update the slope field by clicking **Update** Adjust the axis limits Speed up the animation

Use a fixed step solver