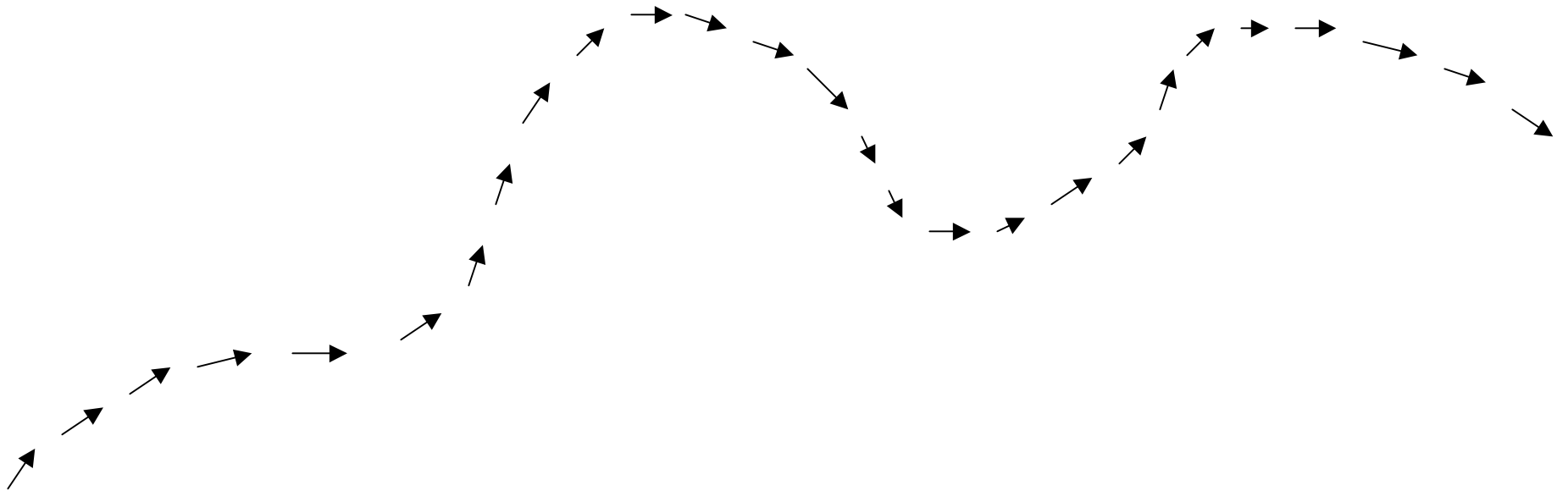
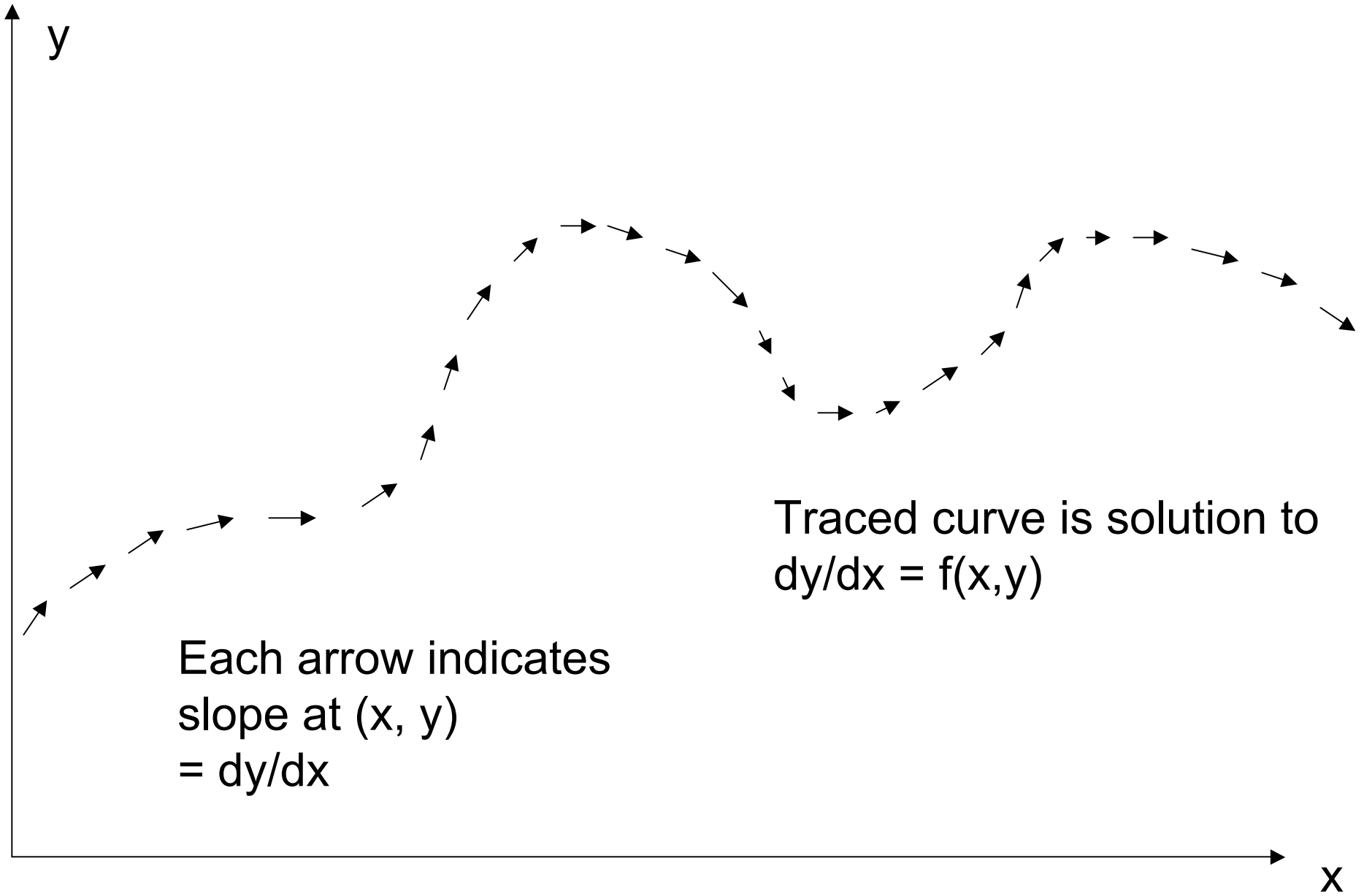


Follow this path:





y

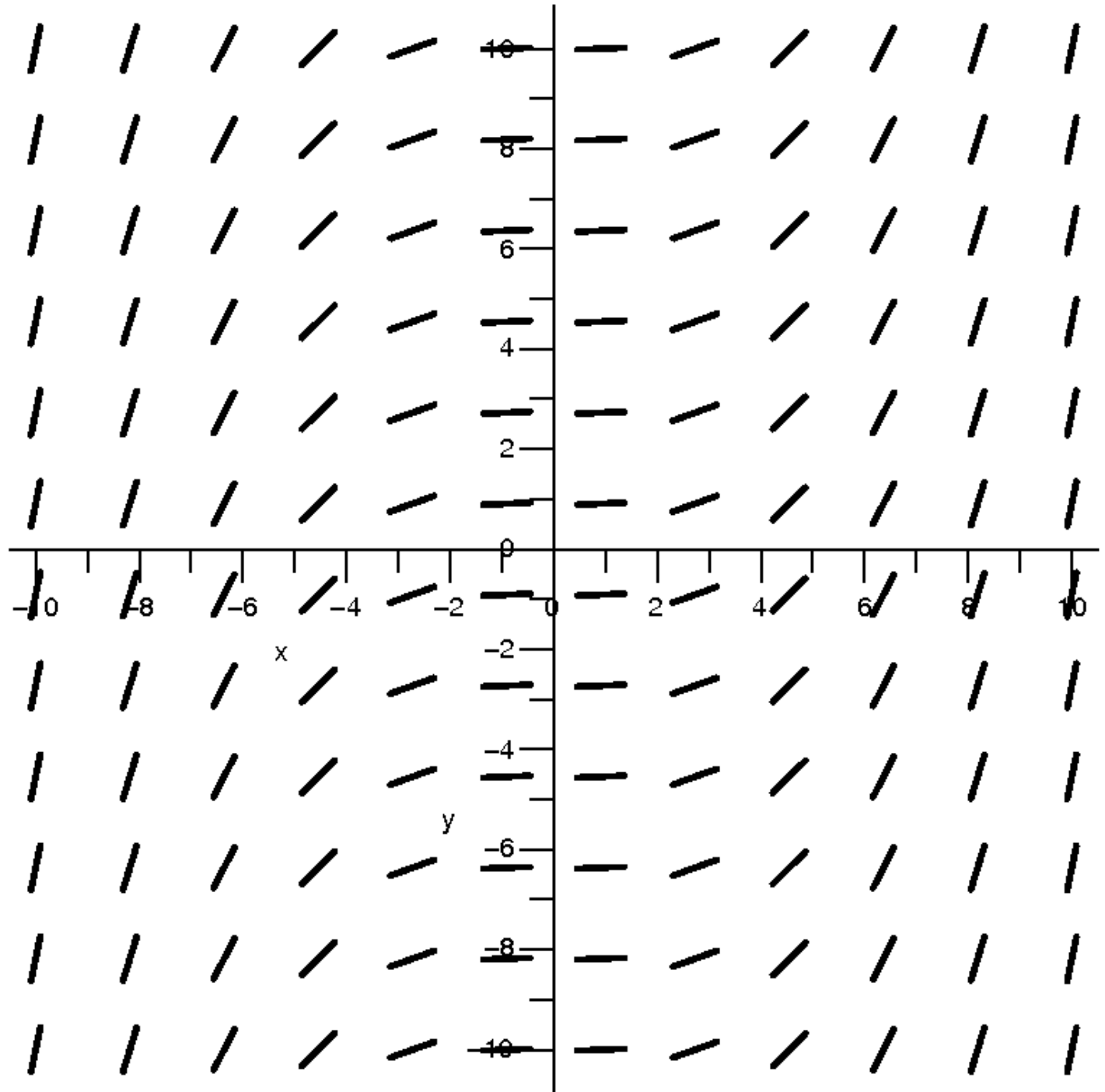
Each arrow indicates
slope at (x, y)
 $= dy/dx$

Traced curve is solution to
 $dy/dx = f(x, y)$

x

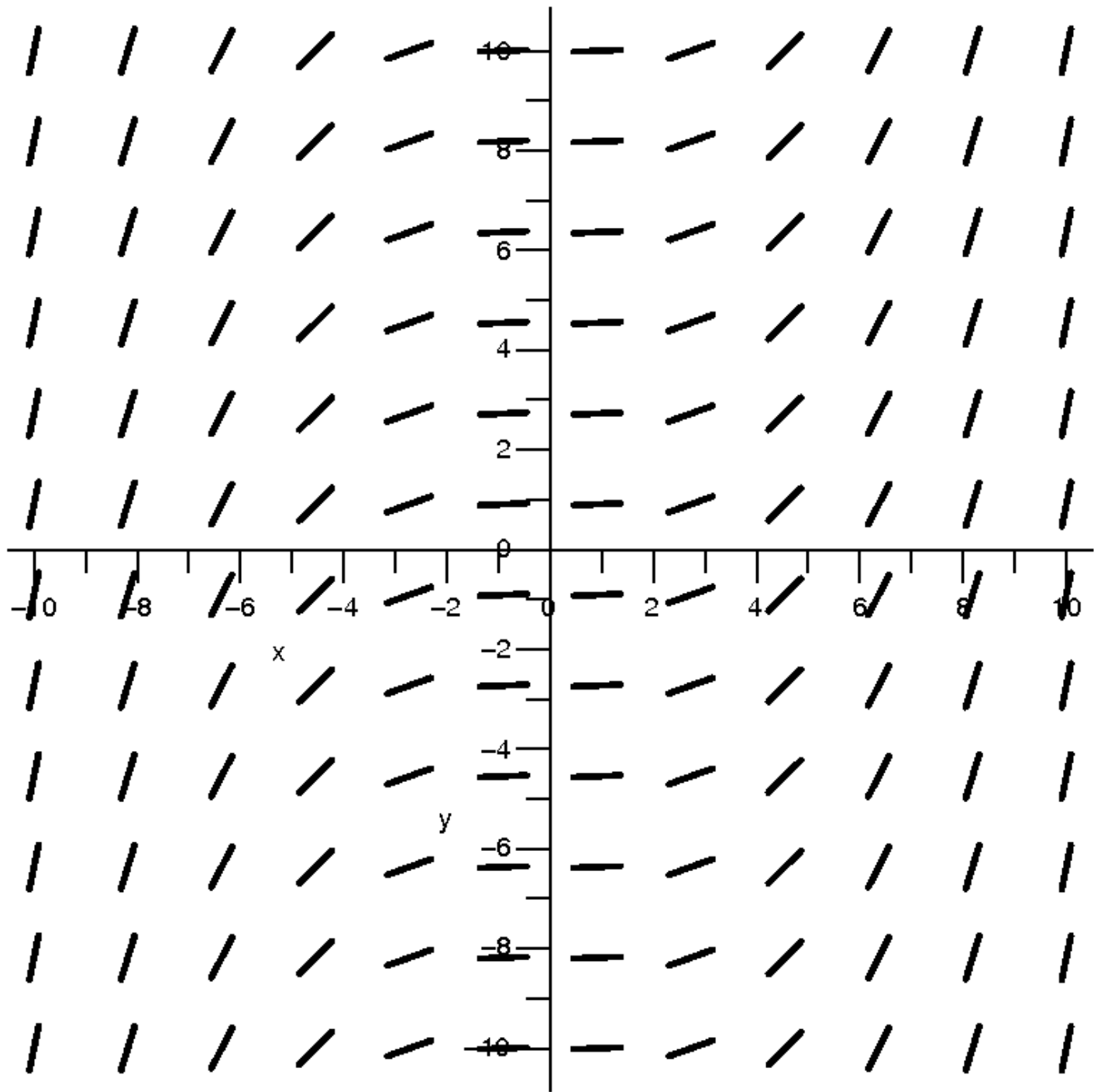
1. Pick an initial condition

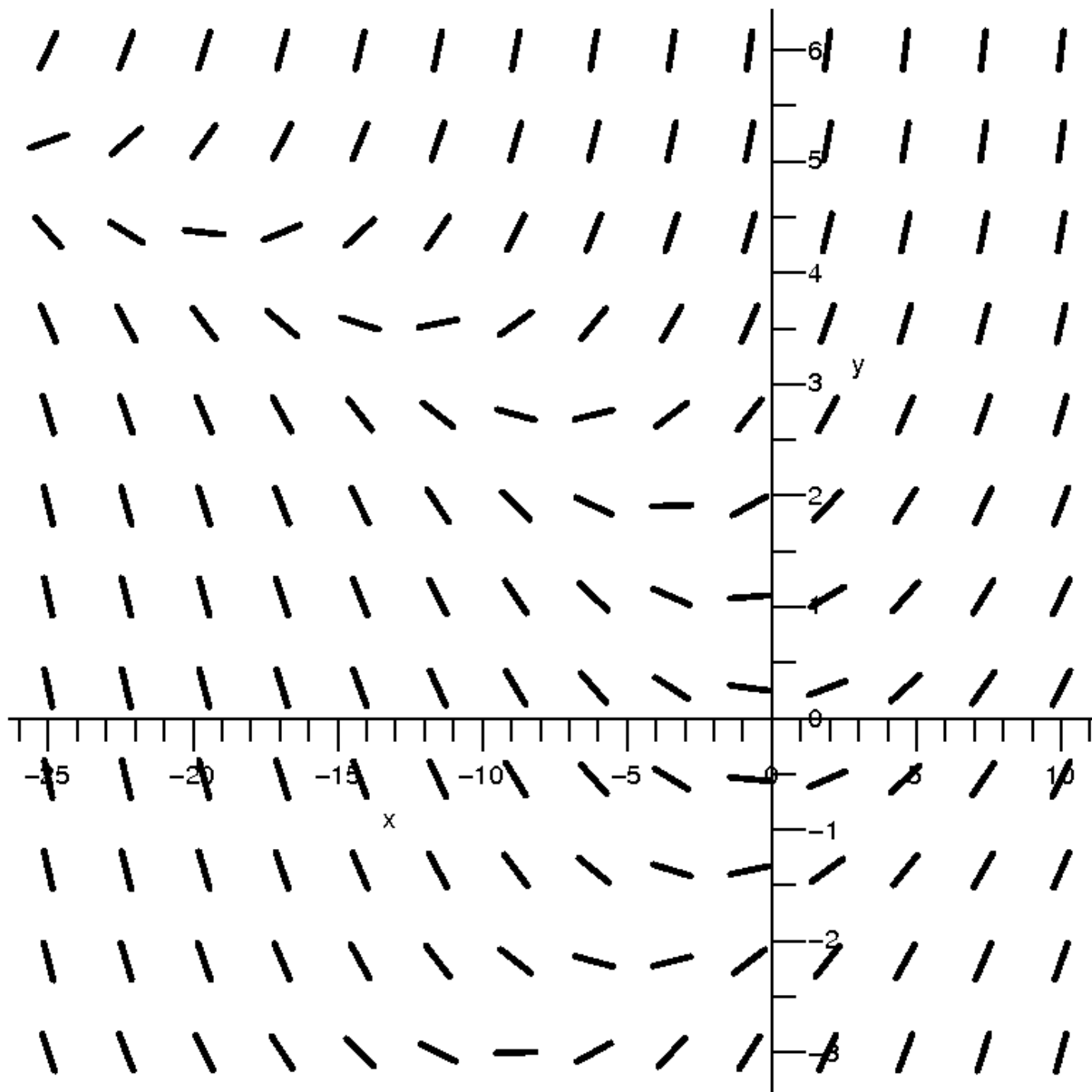
2. Trace the solution curve



$$\frac{dy}{dt} = \frac{t^2}{20}$$

$$y = \frac{t^3}{60} + C$$





Further practice with *Mathematica* demonstration
(available from course web page)

Using the TI-89 to graph direction fields (handout)

Euler's Method for solving differential equations