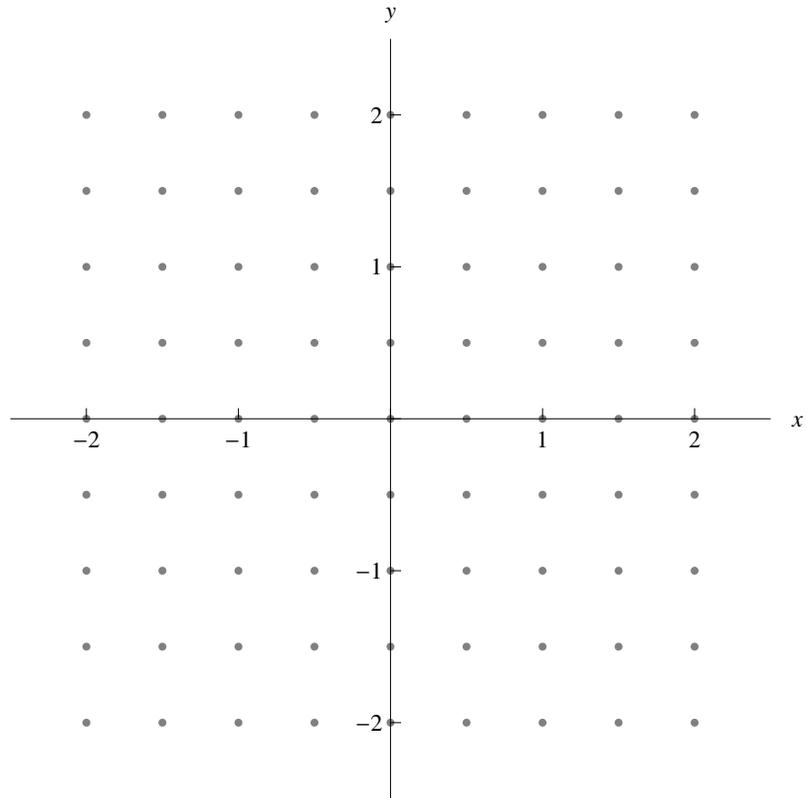


Tangent vector field plots

For each of the following, use the given grid to sketch a tangent vector field for the given 2×2 system of first-order differential equation on the region with $-2 \leq x \leq 2$ and $-2 \leq y \leq 2$.

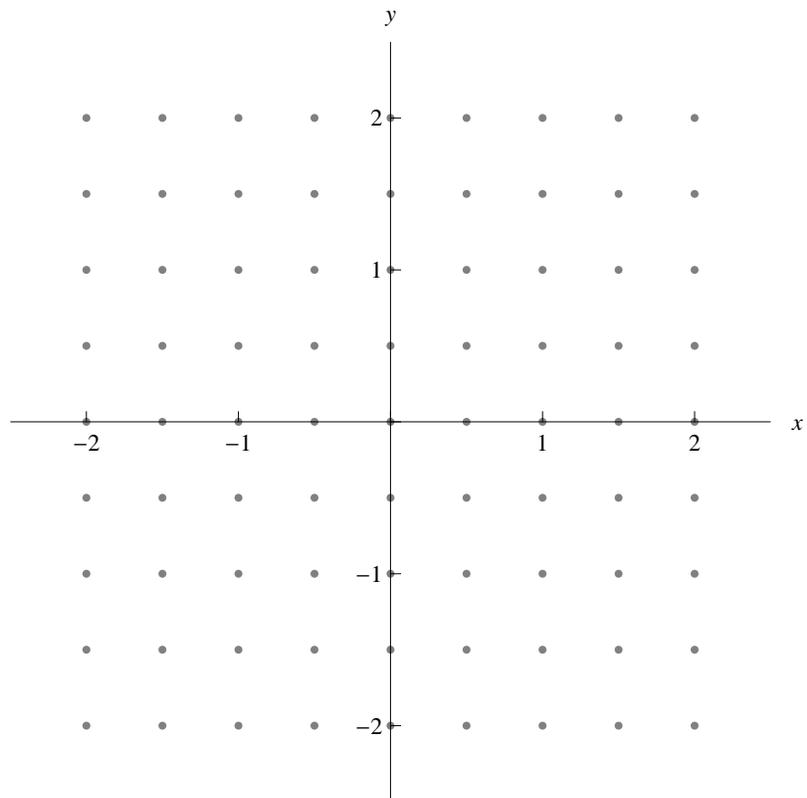
1.

$$\begin{aligned} \frac{dx}{dt} &= 1 \\ \frac{dy}{dt} &= x \end{aligned}$$



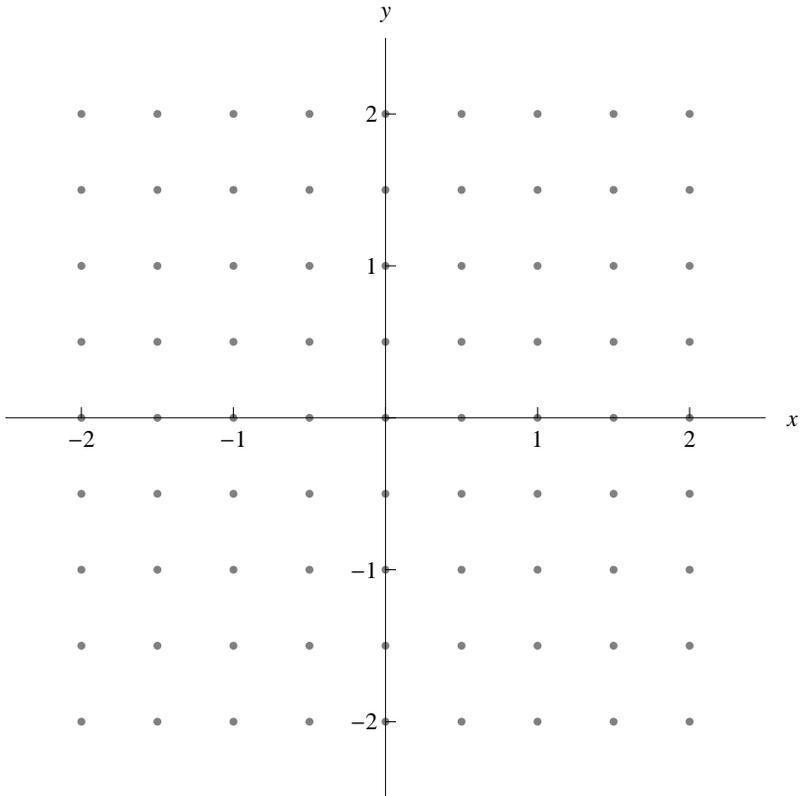
2.

$$\begin{aligned} \frac{dx}{dt} &= x \\ \frac{dy}{dt} &= y \end{aligned}$$



3.

$$\begin{aligned}\frac{dx}{dt} &= y \\ \frac{dy}{dt} &= x\end{aligned}$$



4.

$$\begin{aligned}\frac{dx}{dt} &= -y \\ \frac{dy}{dt} &= x\end{aligned}$$

