

SLOPE FIELDS (§3.1)

A **slope field** (or direction field) is a plot of short line segments indicating the slope of the function at a point for a lattice of points (x, y) in the plane. The slope field is defined by the equation of the derivative, f' , and can be used to determine the graph of the original function, f .

Slope fields enable us to draw a family of curves that have the same derivative.

Example: The slope field for $\frac{dy}{dx} = \cos x$

