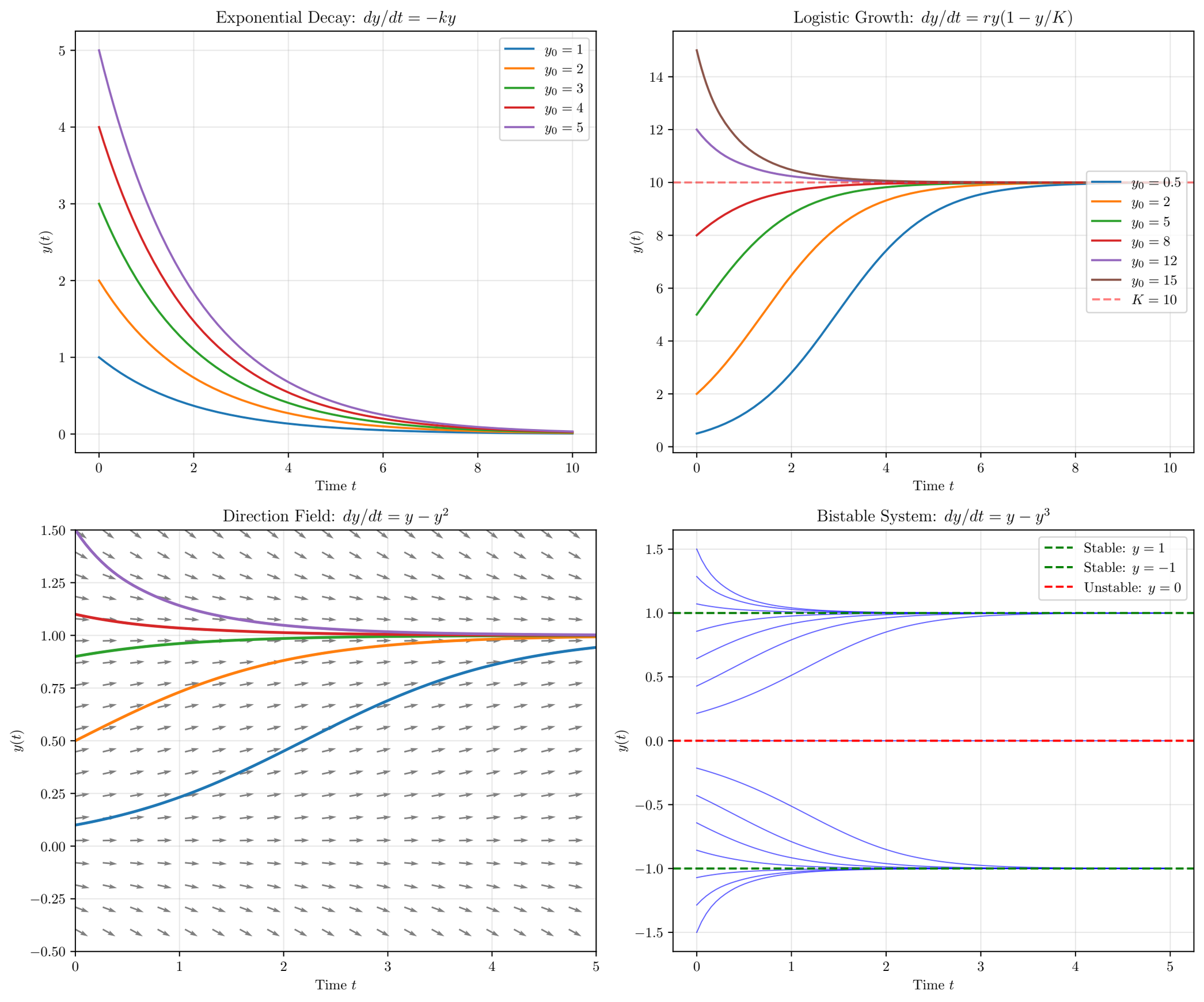
Exponential Decay: $dy/dt = -ky$
$y_0 = 1$
$y_0 = 2$
$y_0 = 3$
$y_0 = 4$
$y_0 = 5$
$y(t)$
Time t
Logistic Growth: $dy/dt = ry(1 - y/K)$
$y_0 = 0.5$
$y_0 = 2$
$y_0 = 5$
$y_0 = 8$
$y_0 = 12$
$y_0 = 15$
$K = 10$
$y(t)$
Time t
Direction Field: $dy/dt = y - y^2$
$y(t)$
Time t
Bistable System: $dy/dt = y - y^3$
Stable: $y = 1$
Stable: $y = -1$
Unstable: $y = 0$
$y(t)$
Time t