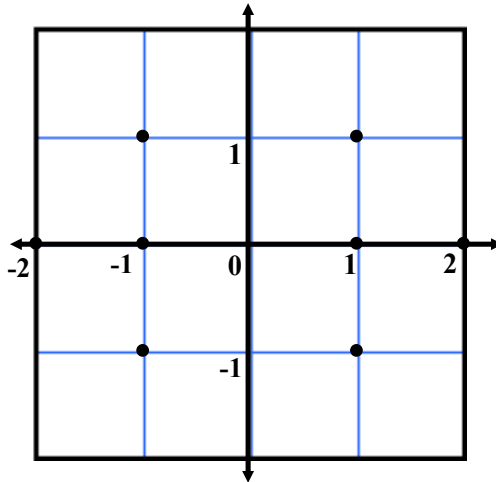


AP Test Question  
2006  
Part B - No Calculator Allowed

5) Consider the differential equation  $\frac{dy}{dx} = \frac{1+y}{x}$ , where  $x \neq 0$ .

a) On the axes provided, sketch a slope field for the given differential equation at the eight points indicated.



b) Find the particular solution  $y = f(x)$  to the differential equation with the initial condition  $f(-1) = 1$  and state its domain.