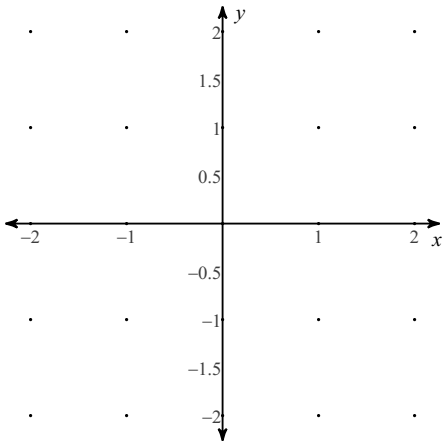
AP Calculus AB Name_____ ID: 1

Making and Matching Slope Fields

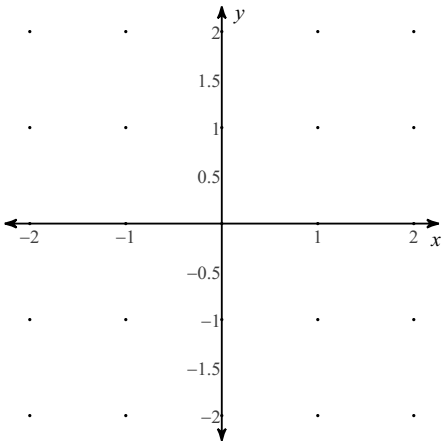
Date_____ Period____

Sketch the slope field for each differential equation.

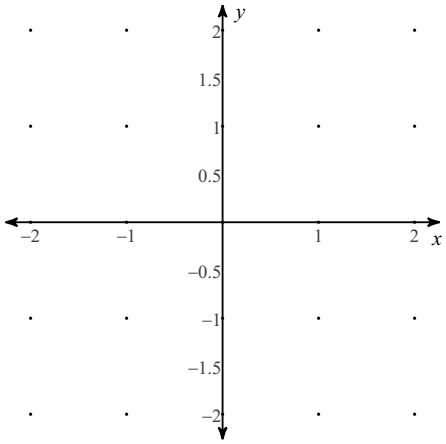
1) $\frac{dy}{dx} = xy$



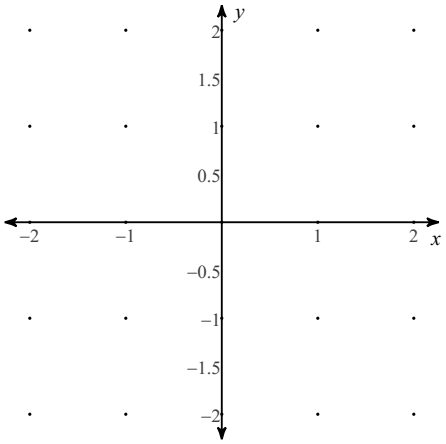
2) $\frac{dy}{dx} = -\frac{x}{y}$

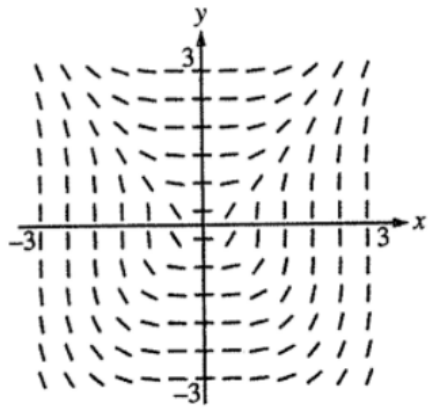


3) $\frac{dy}{dx} = y - x$



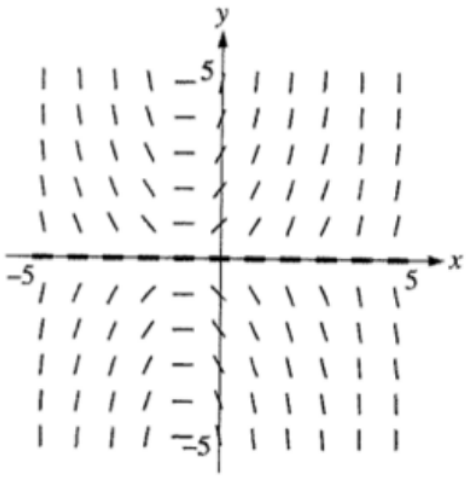
4) $\frac{dy}{dx} = x + y$





14. Shown above is a slope field for which of the following differential equations?

(A) $\frac{dy}{dx} = \frac{x}{y}$ (B) $\frac{dy}{dx} = \frac{x^2}{y^2}$ (C) $\frac{dy}{dx} = \frac{x^3}{y}$ (D) $\frac{dy}{dx} = \frac{x^2}{y}$ (E) $\frac{dy}{dx} = \frac{x^3}{y^2}$

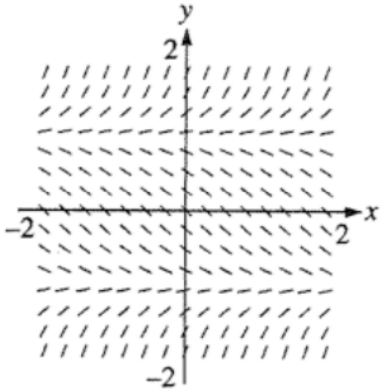


$\frac{dy}{dx} = xy$ $\frac{dy}{dx} = xy - y$ $\frac{dy}{dx} = xy + y$

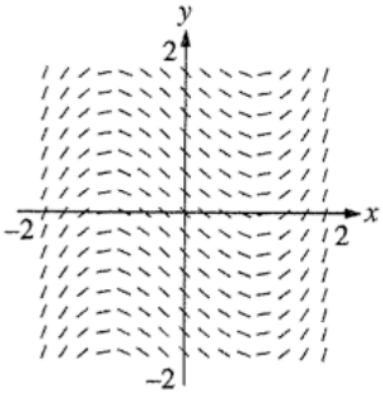
$\frac{dy}{dx} = xy + x$ $\frac{dy}{dx} = (x+1)^3$

27. Which of the following could be the slope field for the differential equation $\frac{dy}{dx} = y^2 - 1$?

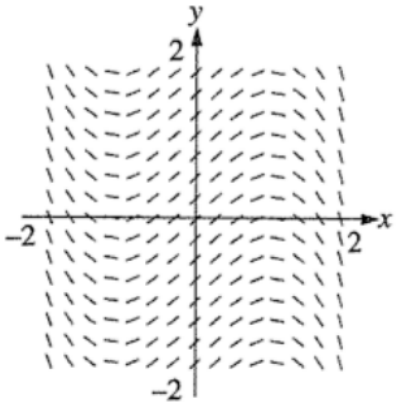
(A)



(B)



(C)



(D)