

4. [12 points] Each graph below is a slope field for one of the differential equations. Beneath each slope field, write the letter of the differential equation in the blank. There is only one correct differential equation for each slope field. Assume  $A > 0$  and  $B < 0$  are constants. You do not need to show your work. Any ambiguous answers will be marked incorrect.

(N)  $\frac{dy}{dx} = (A - y)^2(B - y)$

(P)  $\frac{dy}{dx} = (A + y)(B + y)^2$

(Q)  $\frac{dy}{dx} = (A - y)(B - y)$

(R)  $\frac{dy}{dx} = (y - A)(B - y)$

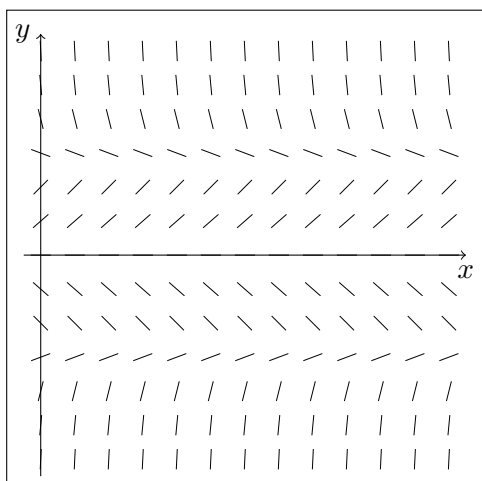
(S)  $\frac{dy}{dx} = (y - A)^2(y + B)$

(T)  $\frac{dy}{dx} = y(A - y^2)$

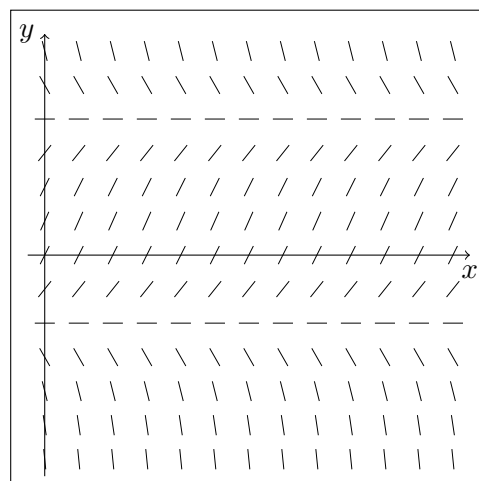
(V)  $\frac{dy}{dx} = y(y^2 + B)$

(W)  $\frac{dy}{dx} = y(y^2 - B)$

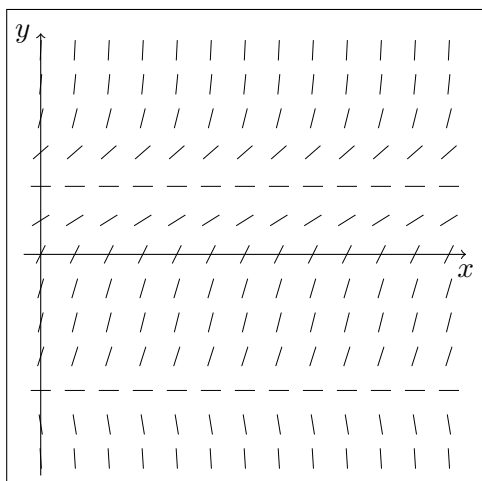
(Z)  $\frac{dy}{dx} = y^2(y + A)$



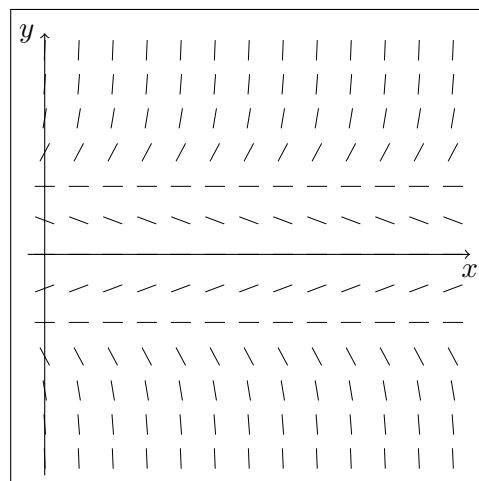
Answer: \_\_\_\_\_



Answer: \_\_\_\_\_



Answer: \_\_\_\_\_



Answer: \_\_\_\_\_