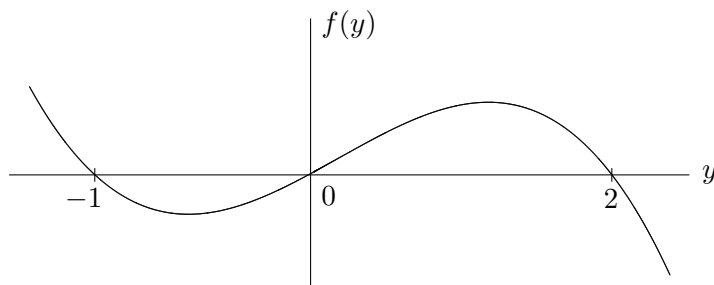


5. (10 points) Let f be the function whose graph is given on the figure below.



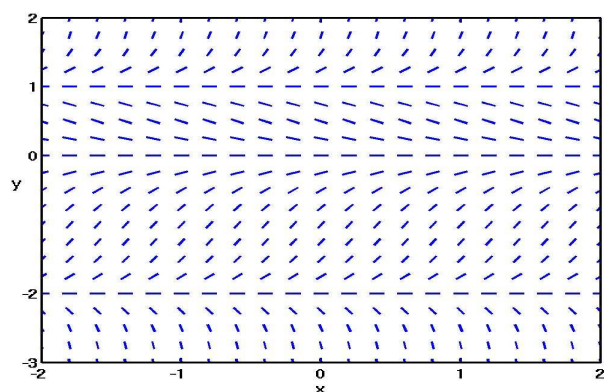
(a) On the **separate yellow sheet**, six field plots are displayed. Choose the one that corresponds to the differential equation $\frac{dy}{dx} = f(y)$.

ANSWER : _____.

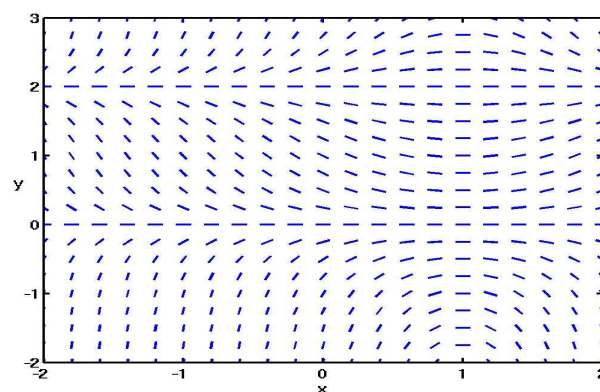
(b) Find all the equilibrium solutions of the differential equation $\frac{dy}{dx} = f(y)$.

(c) Which of the equilibrium solutions you found in part (b) are stable? *Explain the reason(s) for your answer(s).*

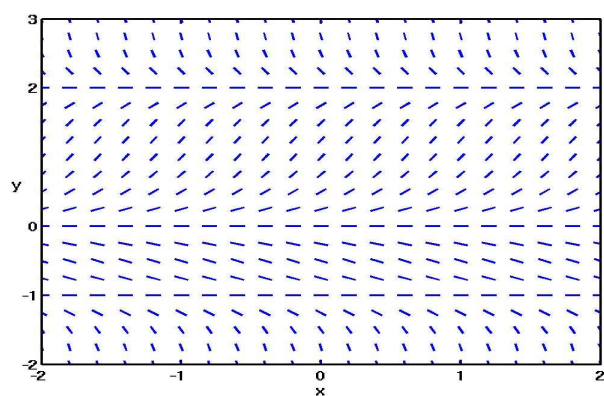
The plots shown on this page refer
to Problem 5 on page 5.



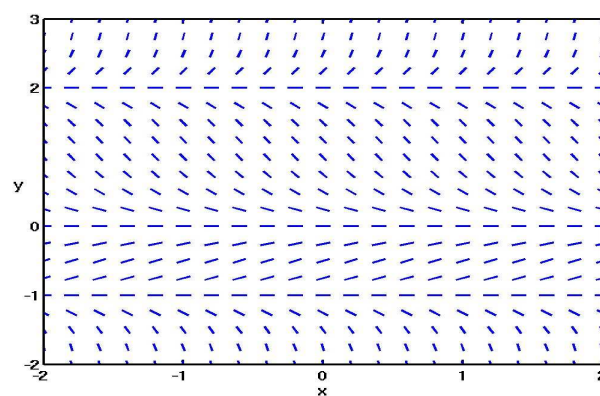
Plot A



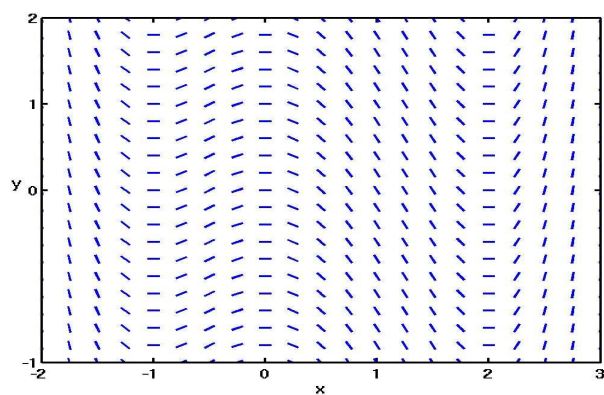
Plot B



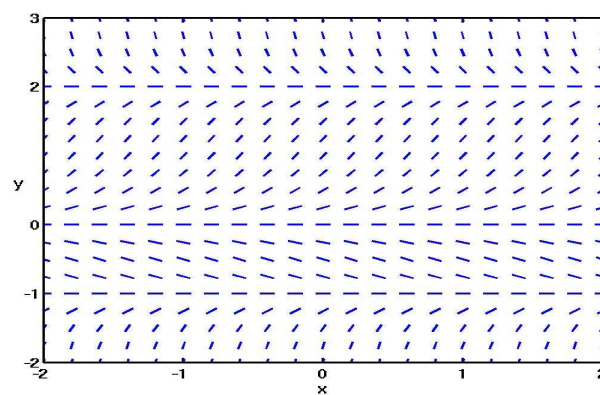
Plot C



Plot D



Plot E



Plot F