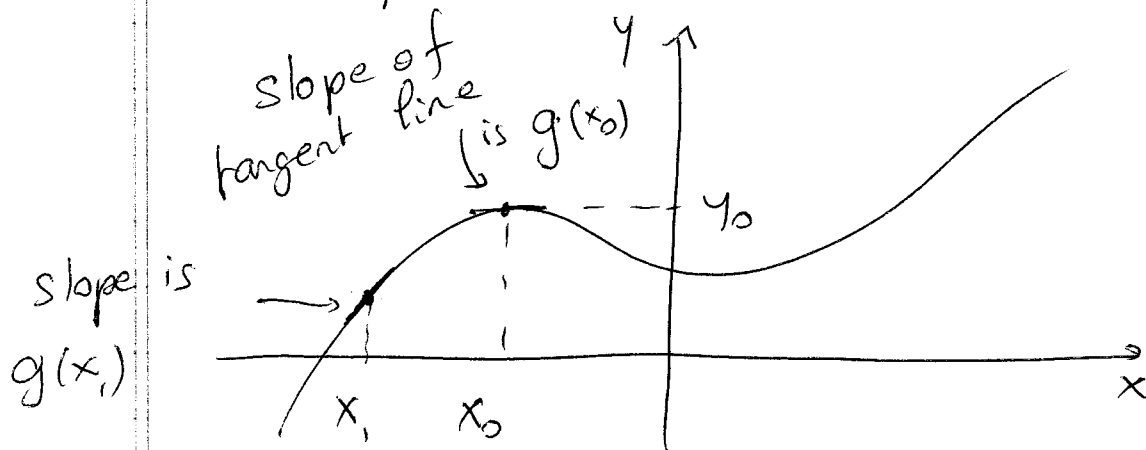


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1/2

# Slope fields $y' = g(x)$

If you have a solution curve

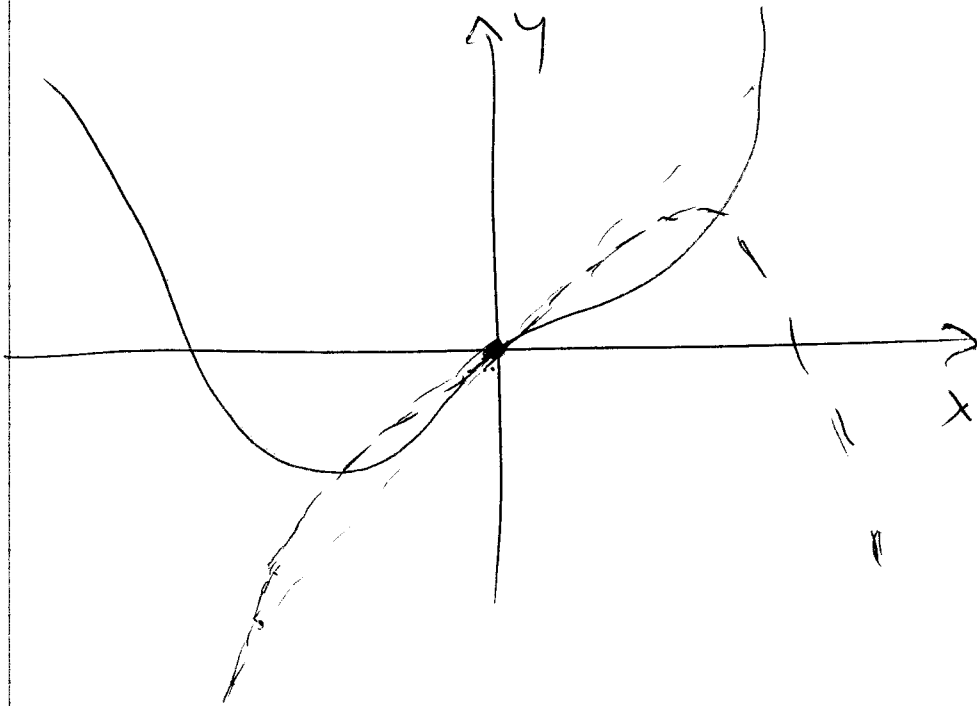


Assume  $g$  is even

- We know that the family of solution curves of  $y' = g(x)$  is symmetric w.r.t. origin.
- We know there is a solution that goes through the origin (from existence)
- We know this solution is unique (from uniqueness).

Look at the solution that goes  $2/2$   
through the origin.

Assume it is not odd



This is impossible because of  
uniqueness, since we would have 2  
solutions going through the origin.