Higher Order

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Higher Order Derivatives

- Partial derivatives can be repeated, with notation given by
  - $f_{xx} = \frac{\partial^2}{\partial x \partial x} f(x, y)$
- Since this multi-variable calculus, we can mix these derivatives
  - $f_{xy} = \frac{\partial^2}{\partial x \partial y} f(x, y)$
- For second order derivatives, we have Clairault's theorem
  - $f_{xy} = f_{yx}$