

Intermediate Microeconomics, fall 2014, homework 1

Part A: Derivatives review. Given the function in the left-hand column, write the derivative with respect to x in the right-hand column.

f	$\frac{\partial f}{\partial x}$
$5x - 1$	
$x^2 + 3x - 4$	
$x^{-2/5}$	
$e^{\sqrt{x}}$	
$(x^2 + 4x + 6)^2$	
$\sqrt[3]{x}$	
$\alpha \ln x + \beta \ln y$	
$x^\alpha y^\beta$	
$3x^2 - xy + y$	
$\sqrt{x^2 - 3y}$	
$e^{x-y} - x^2y$	
$\frac{x^{1/3}y^{2/3}}{x}$	

Part B: Workouts. Do workouts 2.1 through 2.5, and workouts 3.1 through 3.3.