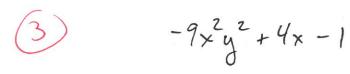


Math 1215: Quiz #4

Winter 2018

Name: Solutions A#: Section:

- 1. Let $f(x,y) = y^3 3x^3y^2 + 2x^2 x + 1$. Compute:
 - (a) $\frac{\partial f}{\partial x}$



(b)
$$\frac{\partial f}{\partial y}$$

$$(2) \qquad 3y^2 - 6x^3y$$

(c)
$$\frac{\partial^2 f}{\partial y \, \partial x}$$

2. The number of people who ride the bus in Halifax is a function B(p,t) of the city's population p and the price t of a bus ticket. At any given point (p,t), would we expect the value of $\frac{\partial B}{\partial t}$ to be positive or negative? Why?

Negative! As ticket price increases, fewer people will ride the bus.