

ECON 2500
Fall 2009
Dr. Tufte

Homework 15

Due: Wednesday, October 14, at the start of class.

1) Use the general formula for finding a derivative (*i.e.*, the one using limits) to find the derivative of $f(x) = 2x^2 + 9x$.

2) Using the shorthand formula (*i.e.*, the power rule), state the derivatives of the following:

a) $f(x) = 5x^2$

b) $f(x) = x^{-1}$

c) $f(x) = -3x^{-2}$

d) $f(x) = x^{1.5}$

e) $f(x) = x^{0.4}$

f) $f(x) = 6x^3$