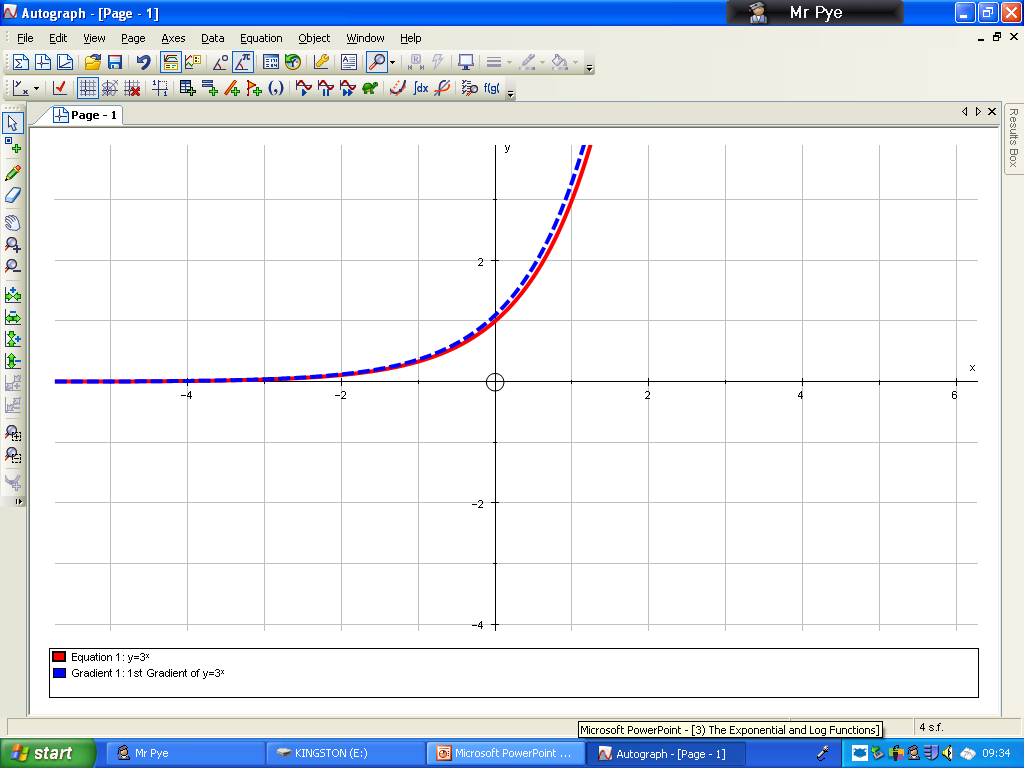
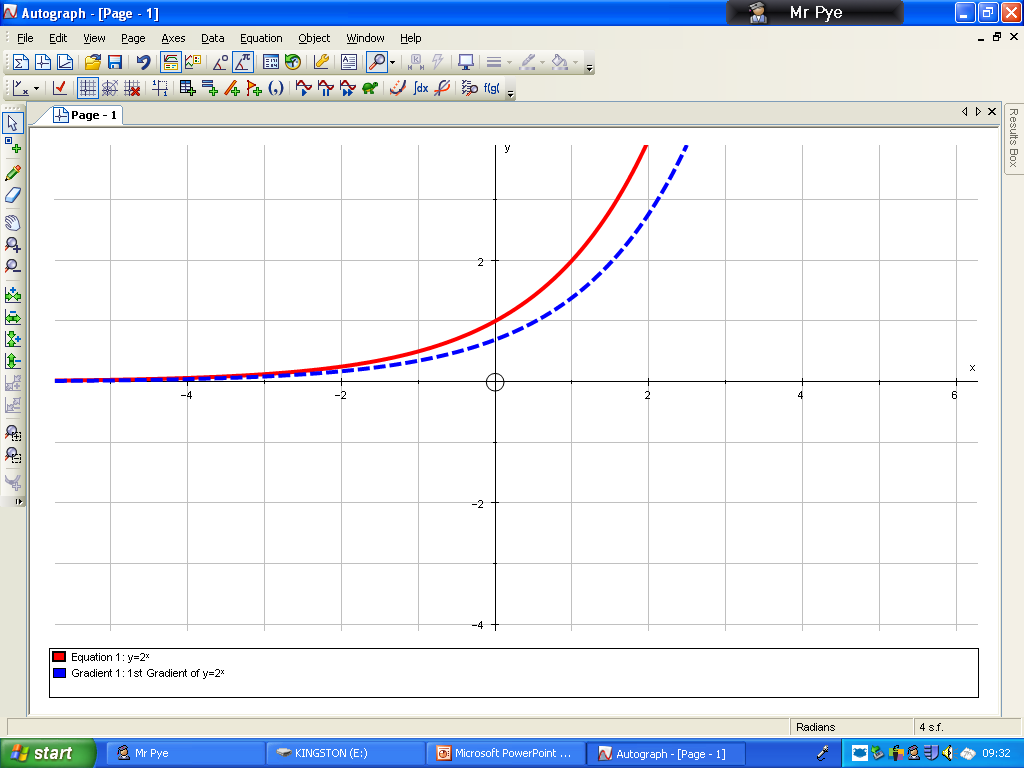
**14B Euler’s Number ‘e’**



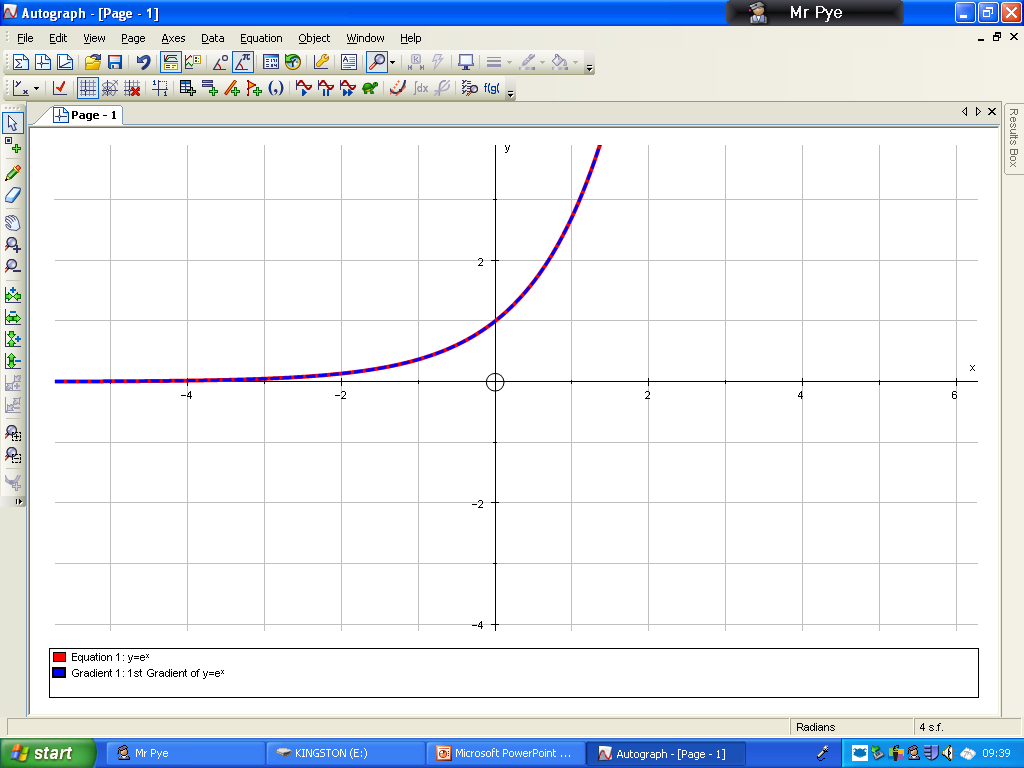
**y = 3x**

**y = 3xln3**



**y = 2xln2**

**y = 2x**



1) Differentiate the following with respect to x:

a)

b)

c)

2. a) Sketch y = 2ex

y = ex

(0,1)

b) Sketch y = ex + 2

y = ex

(0,1)

c) Sketch y = -ex

y = ex

(0,1)

d) Sketch y = e2x

y = ex

(0,1)

e) Sketch y = ex + 1

y = ex

(0,1)

f) Sketch y = 10e-x

y = ex

(0,1)

g) Sketch y = 3 + 4e0.5x

y = ex

(0,1)

y = ex

(0,1)

y = ex

(0,1)