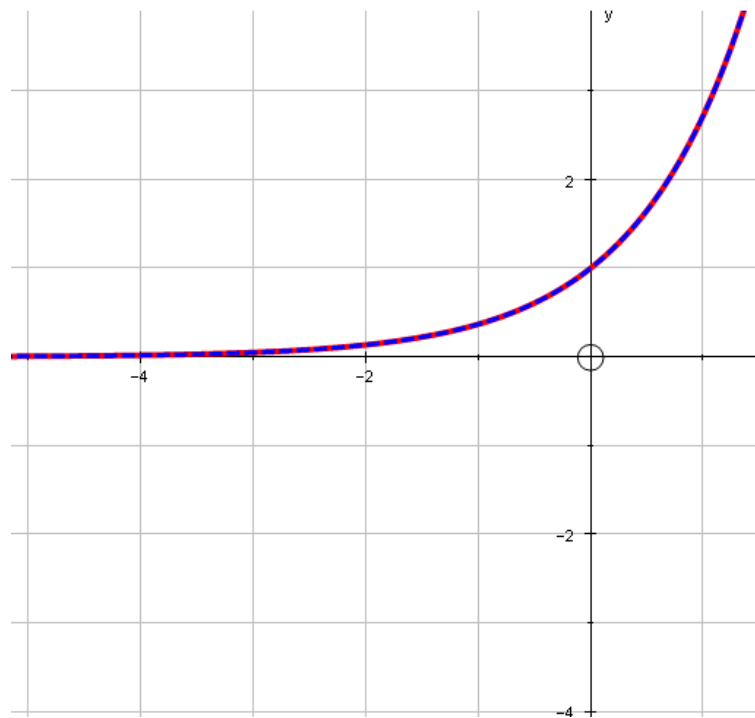
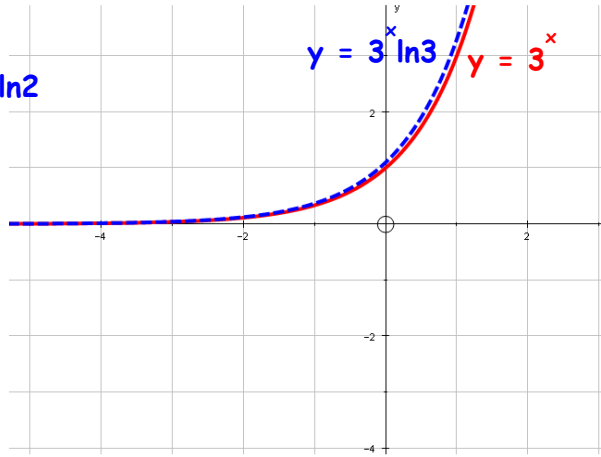
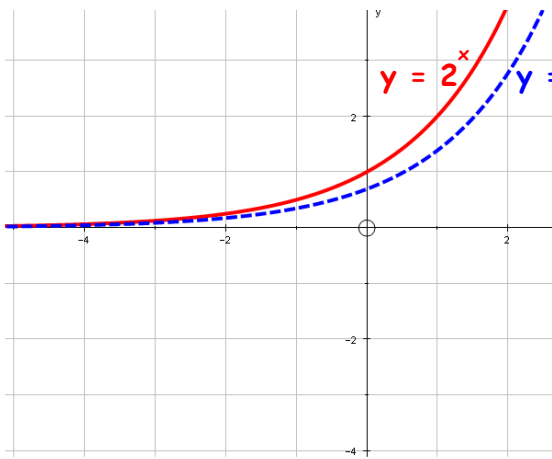


## 14B Euler's Number 'e'



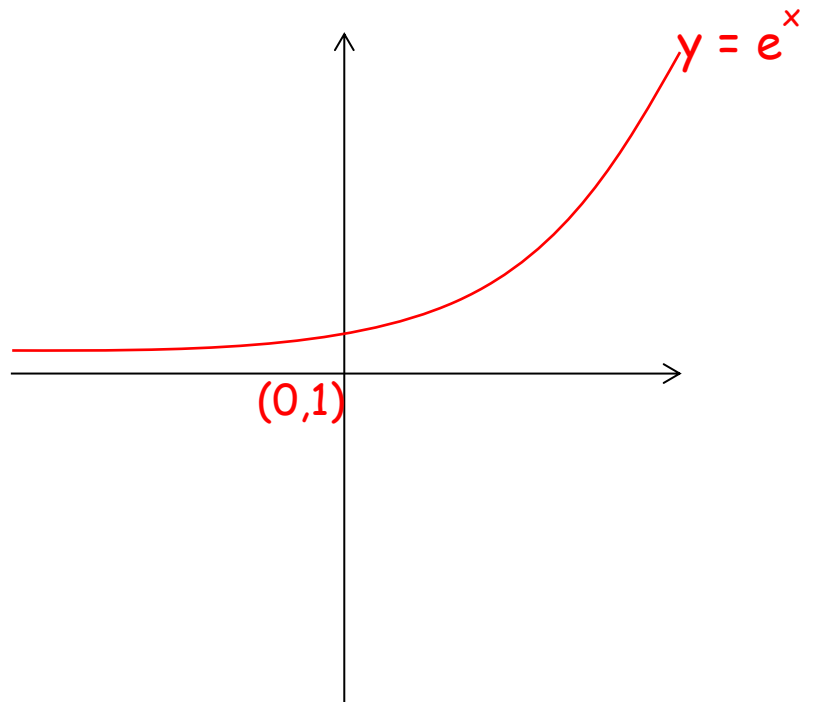
1) Differentiate the following with respect to x:

a)  $y = e^{2x}$

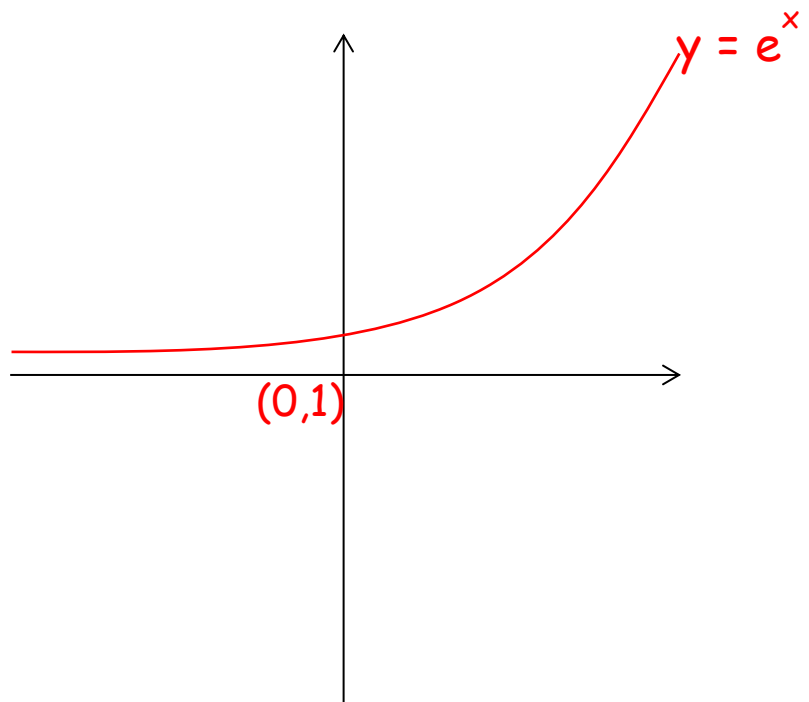
b)  $y = e^{-\frac{1}{2}x}$

c)  $y = 3e^{2x}$

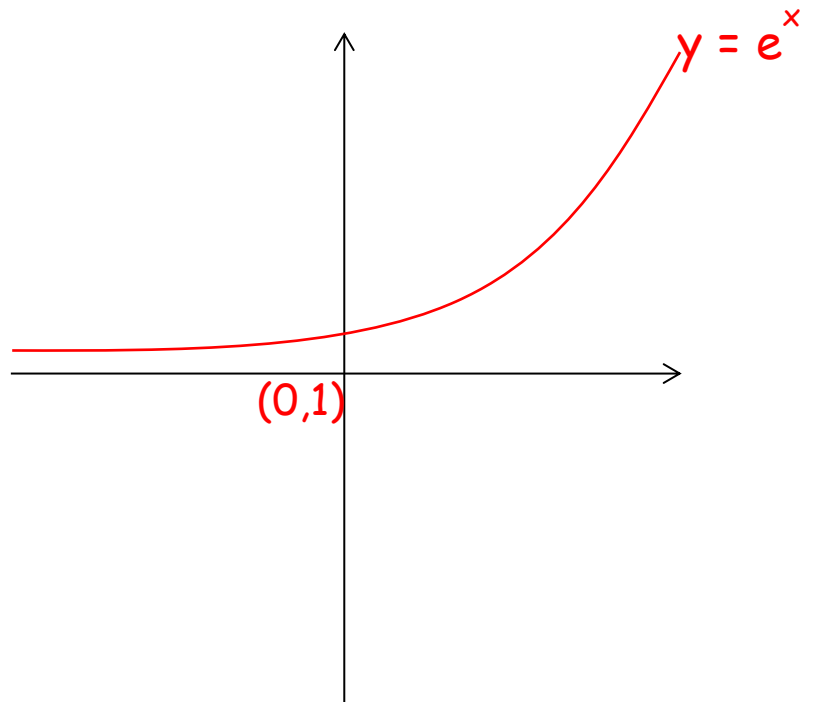
2. a) Sketch  $y = 2e^x$



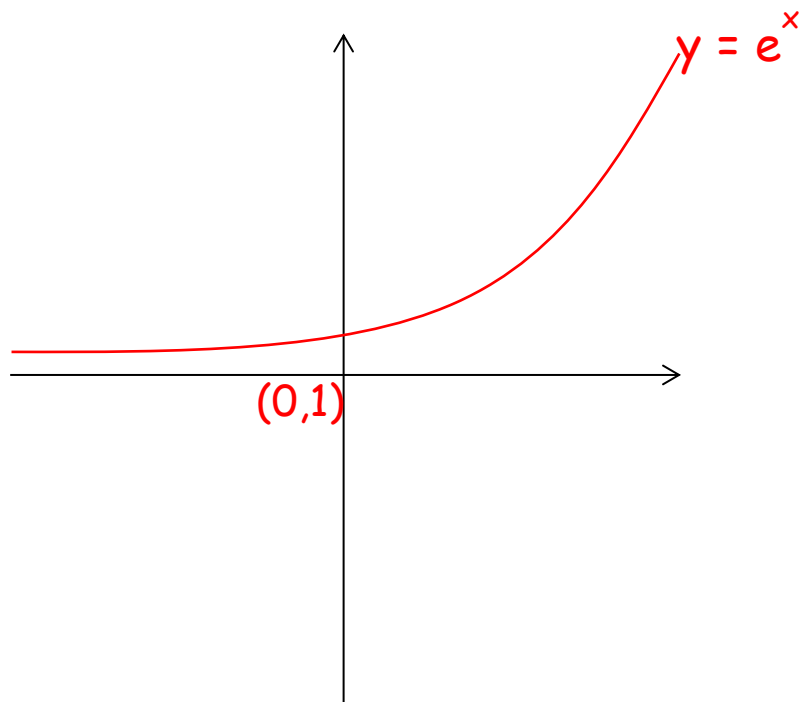
b) Sketch  $y = e^x + 2$



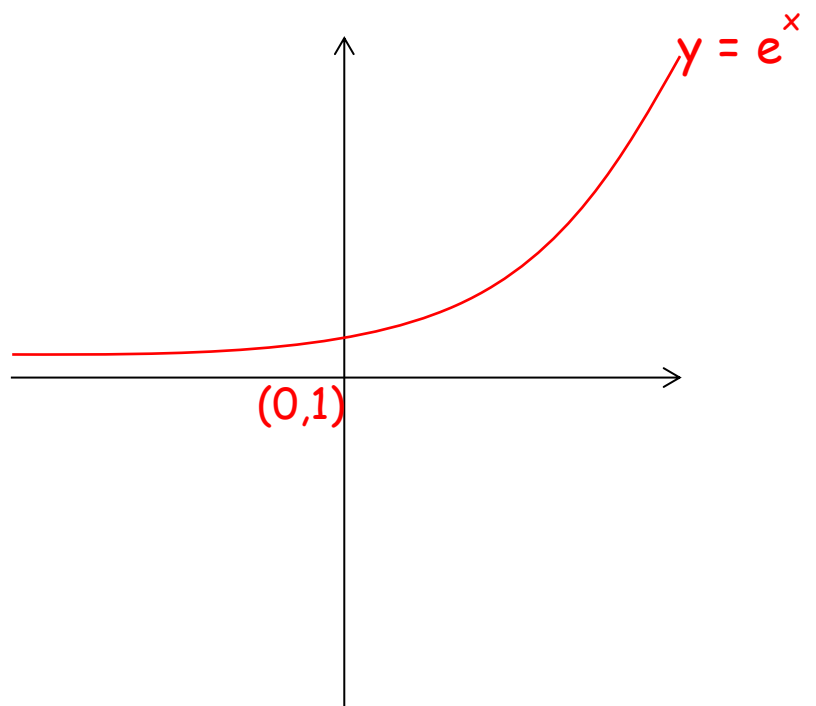
c) Sketch  $y = -e^x$



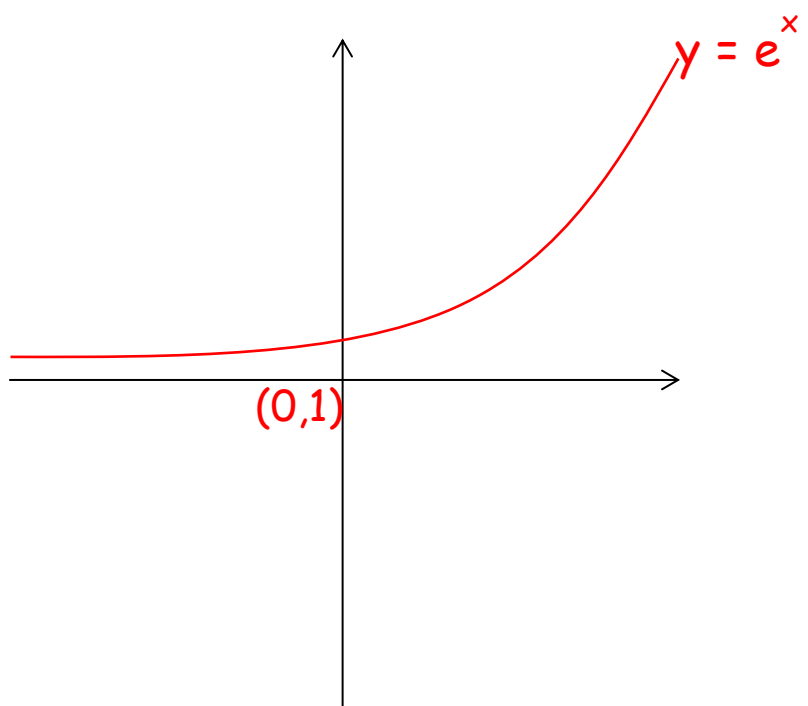
d) Sketch  $y = e^{2x}$



e) Sketch  $y = e^{x+1}$



f) Sketch  $y = 10e^{-x}$



g) Sketch  $y = 3 + 4e^{0.5x}$

