

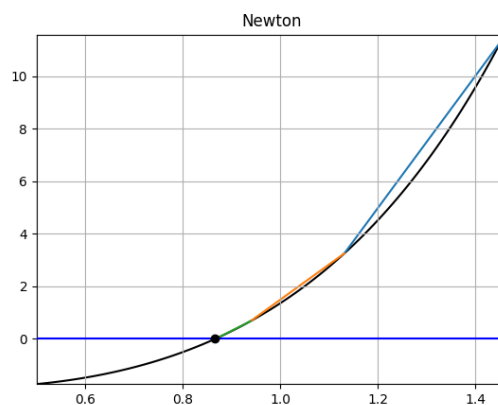
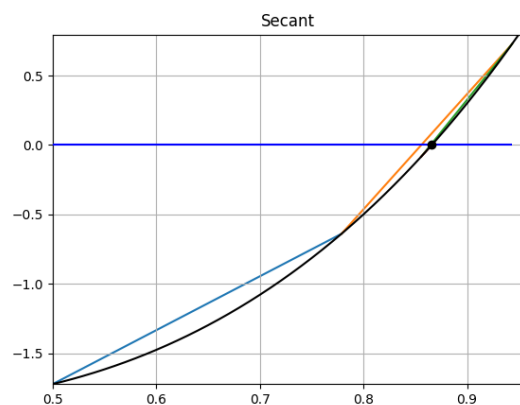
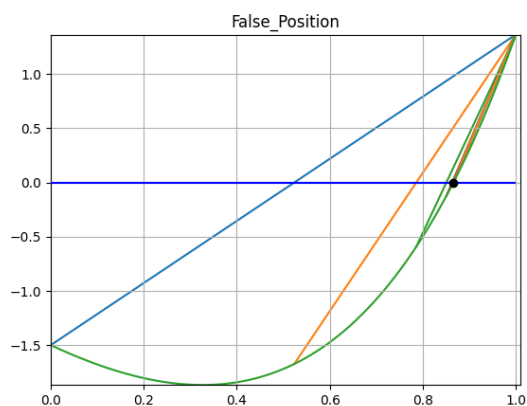
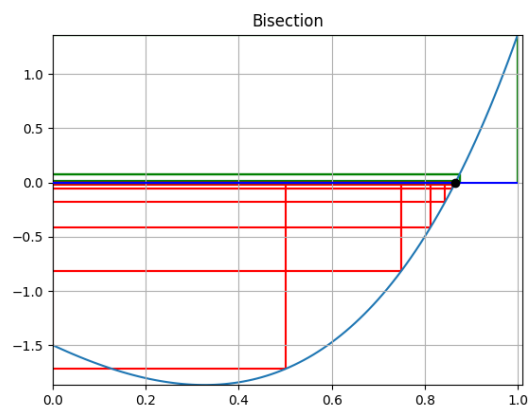
數值方法

資工三乙

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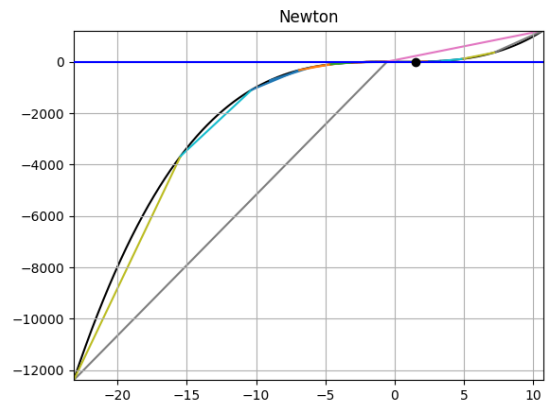
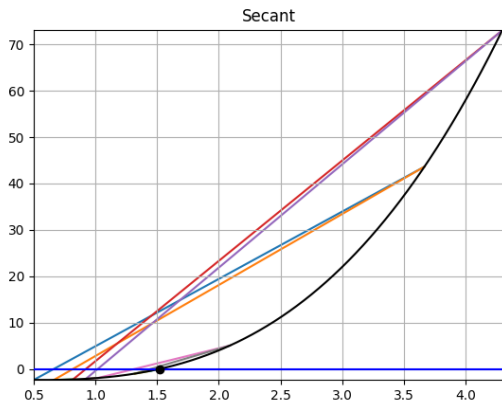
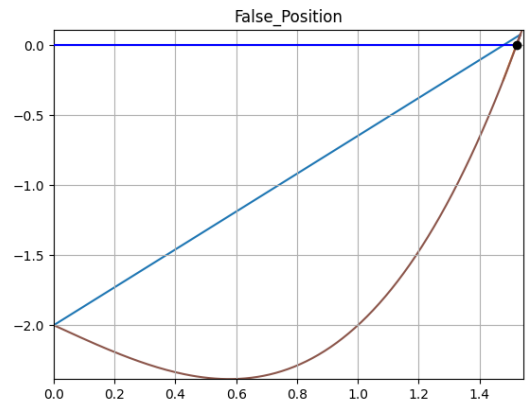
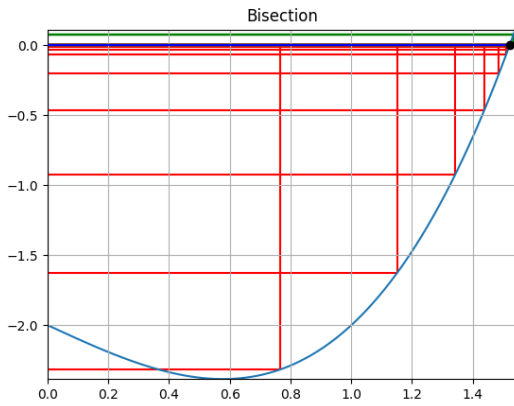
林采昕

Q1: $e^{2x} - 3 \sin(x) - x - 2.5$



Fixed Point : 發散

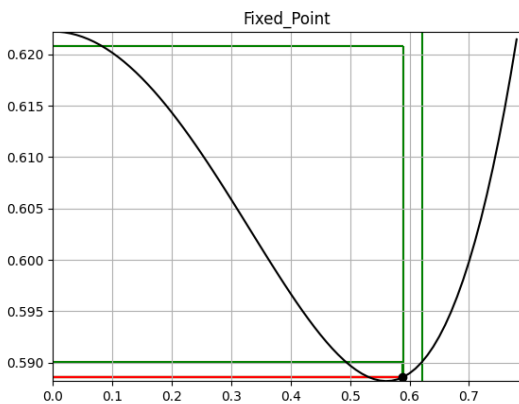
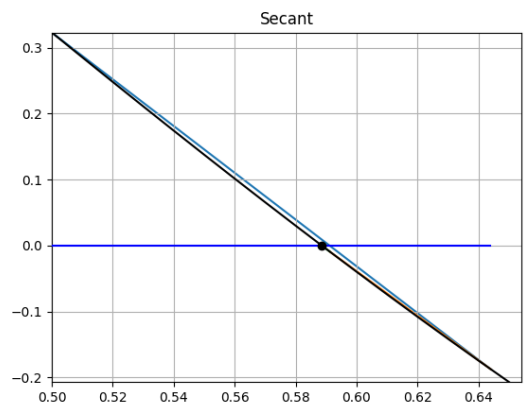
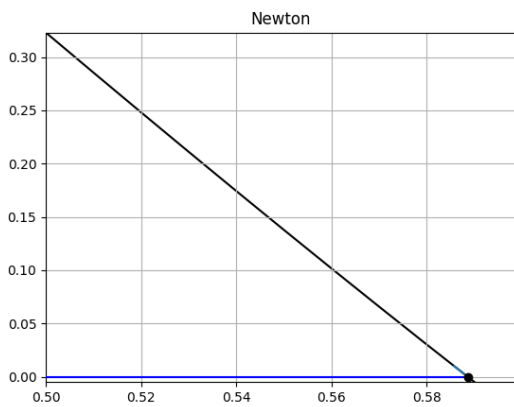
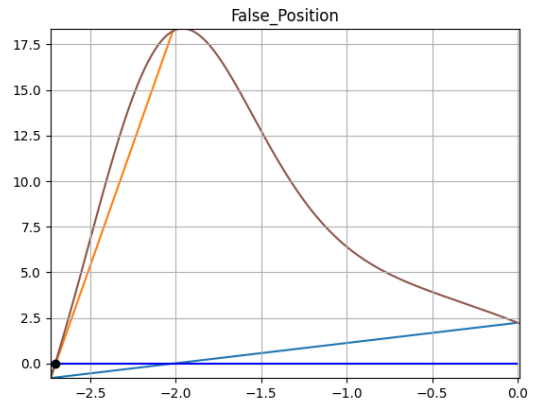
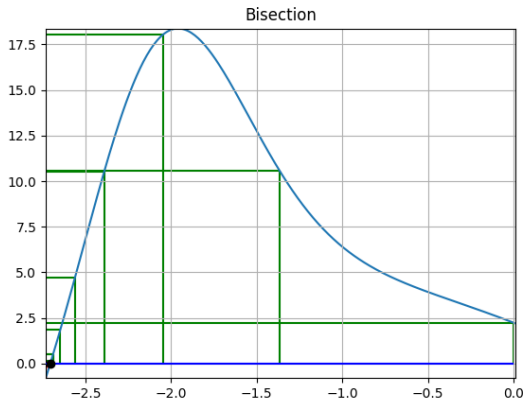
Q2: $x^3 - x - 2$



Fixed Point : 發散

Q4 :

$$e^{1.63x\sin(x)} - 2.38x^2 - 3.6x + 1.24$$



結論

Method	Advantage	Disadvantage
Bisection	想法簡單	會優先往終點靠近
False Position	速度Bisection較快	若兩點平行，則不會有結果
Newton	速度快	若斜率為0，則不會有結果
Secant	不需要微分	若斜率為0，則不會有結果
Fixed Point	不需要微分	若圖為發散，則無解