

## 牛頓冷卻定律—自我檢測解答

1. (1)
2. (4)
3. (2)
4. (3)
5. (4) 綜合練習之內，只能出簡單的「分離變數法」可解的題目，像這題

1-(1) `plot(1+exp(-2*x), x=0..3, y=0.5..2.2, thickness=3);`

然後把圖形拉寬到左邊界大約在第三個字母 o 的位置

(2) `plot(1.60241-(1/Pi)*arctan(3*(x-1)), x=0..3, y=0.5..2.2, thickness=3);`

(3) `plot(2-exp(-2*x), x=0..3, y=0.5..2.2, thickness=3);`

(4) `plot(1.39758+(1/Pi)*arctan(3*(x-1)), x=0..3, y=0.5..2.2, thickness=3);`

2-(1) `plot(1.578-(1/Pi)*arctan(4*(x-1)), x=0..3, y=0.5..2.2, thickness=3);`

(2) `plot(2-x^2/9, x=0..3, y=0.5..2.2, thickness=3);`

(3) 同 1-(1)

(4) `plot(1+exp(-8*x), x=0..3, y=0.5..2.2, thickness=3);`