

多項式局部圖形像直線

1. 已知 $f(x) = x^4 + x + 1 = 19 + 33(x - 2) + 24(x - 2)^2 + 8(x - 2)^3 + (x - 2)^4$ ，則

$y = f(x)$ 的函數圖形通過以下哪一點？

- (1) (2, 19)
- (2) (2, 33)
- (3) (2, 2)
- (4) (2, 1)

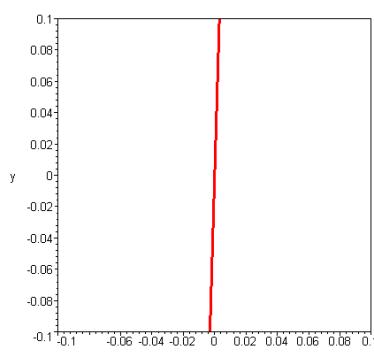
2. 已知 $f(x) = x^4 + x + 1 = 19 + 33(x - 2) + 24(x - 2)^2 + 8(x - 2)^3 + (x - 2)^4$ ，而

$y = f(x)$ 在 $x = 2$ 附近的函數圖形像直線 $y = m(x - 2) + 19$ ，試問斜率 m 之值為何？

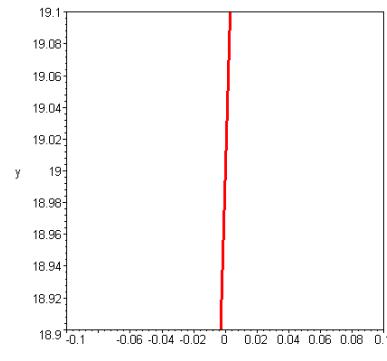
- (1) 19
- (2) 33
- (3) 2
- (4) -2

3. 根據 $f(x) = x^4 + x + 1 = 19 + 33(x - 2) + 24(x - 2)^2 + 8(x - 2)^3 + (x - 2)^4$ ，試判

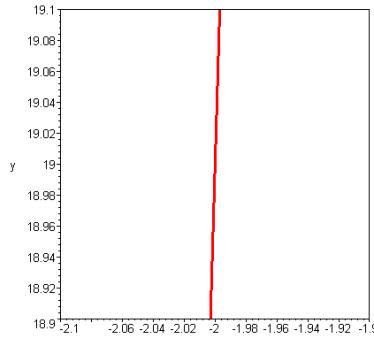
斷以下何者是 $y = f(x)$ 在 $x = 2$ 附近的函數圖形？



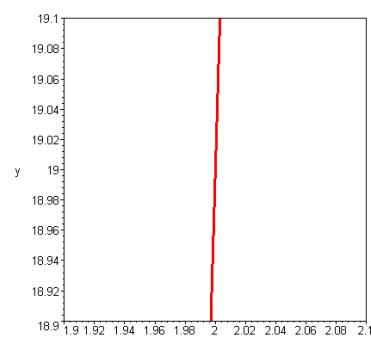
(1)



(2)



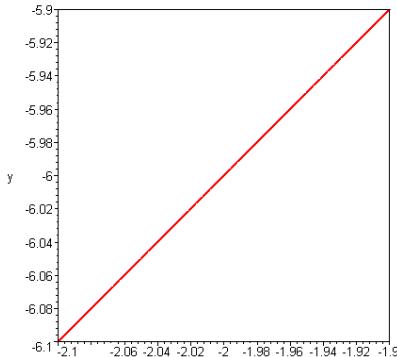
(3)



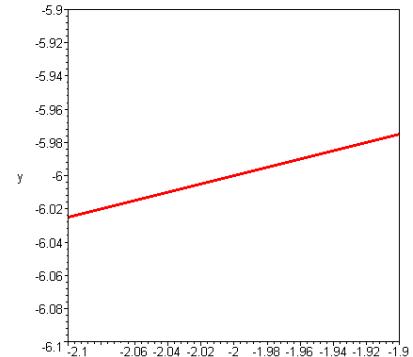
(4)

4. 根據 $f(x) = x^3 - x = -6 + 11(x+2) - 6(x+2)^2 + (x+2)^3$ ，試判斷以下何者是

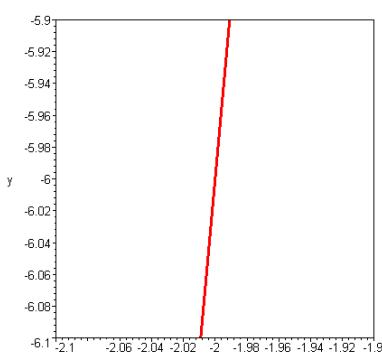
$y = f(x)$ 在 $x = -2$ 附近的函數圖形？



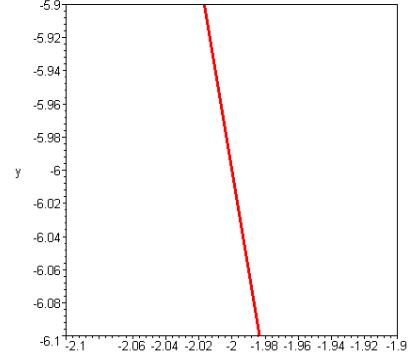
(1)



(2)



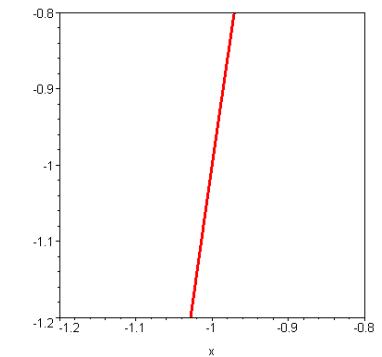
(3)



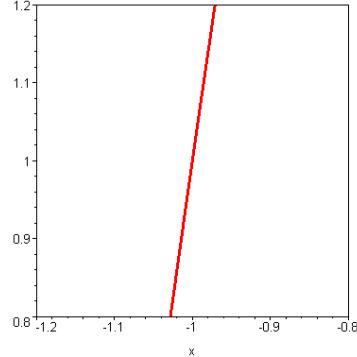
(4)

5. 根據 $f(x) = x^3 - x^2 + 2x + 3 = -1 + 7(x+1) - 4(x+1)^2 + (x+1)^3$ ，試判斷以下

何者為 $y = f(x)$ 在 $x = -1$ 附近的函數圖形？



(1)



(2)

