課題　微分_第 02 回

学年[2]年　学科[MI・AC・BC]　番号[　　]　氏名　[　　]

2　次の関数を微分せよ。

(1)　$y = x^8 - 3x^4$

$y' = 8x^7 - 12x^3$

(2)　$y = 4x^4 - 2x^3 + 3x^2 - 7x + 5$

$y' = 16x^3 - 6x^2 + 6x - 7$

(3)　$y = 3x^4 - \dfrac{1}{x^2}$

$y' = 12x^3 + \dfrac{2}{x^3}$

(4)　$y = 2x - 1 + \dfrac{3}{x^2}$

$y' = 2 - \dfrac{6}{x^3}$

(5)　$y = 5x^3 + 4\sqrt{x} + \dfrac{3}{x^2}$

$y' = 15x^2 + \dfrac{2}{\sqrt{x}} - \dfrac{6}{x^3}$

(6)　$y = (3x+7)^4$

$y' = 12(3x+7)^3$

(7)　$y = \dfrac{1}{(3x+7)^4}$

$y' = -\dfrac{12}{(3x+7)^5}$

(8)　$y = \sqrt[4]{3x+7}$

$y' = \dfrac{3}{4\sqrt[4]{(3x+7)^3}}$

(9)　$y = x^6(3x+7)^4$

$y' = 6x^5(3x+7)^3(5x+7)$

(10)　$y = \dfrac{x-1}{x^2+2x-5}$

$y' = \dfrac{-x^2+2x-3}{(x^2+2x-5)^2}$