

■基礎数学1 演習 No.4 いろいろな関数の微分(2) (担当: 谷戸)

4.1. 以下の関数を微分しなさい.

(1)  $y = \cos(4x + 3)$

(3)  $y = \log(1 + x^2)$

(5)  $y = \frac{1}{2} \sin 2x + \frac{1}{7} \tan 7x$

(7)  $y = \sqrt{x} \log x$

(9)  $y = \frac{\cos 3x}{1 + 2x}$

(2)  $y = e^{x^2}$  (注.  $e^{(x^2)}$  の意味)

(4)  $y = \pi^2 x^3 + \sqrt{3}x^2 - e^4 x + \log 2$

(6)  $y = \frac{e^x + e^{-x}}{2}$

(8)  $y = e^{ax}(c_1 \cos bx + c_2 \sin bx)$  ( $a, b, c_1, c_2$  は定数)

(10)  $y = \frac{1}{\sqrt{1-x^2}}$