

問 4.2 次の関数を微分せよ。

(1) $y = x^5$

(2) $y = 3x^2 - 5x + 4$

(3) $y = \frac{2}{x}$

(4) $y = \frac{1}{3x^6}$

(5) $y = \sqrt[3]{x^4}$

(6) $y = \frac{1}{3}x^3 - \frac{1}{x} + 5\sqrt[5]{x}$

(7) $y = (x^2 - 3x + 5)^3$

(8) $y = \frac{1}{(4x-7)^6}$

(9) $y = \sqrt[3]{3x+5}$

(10) $y = \frac{2}{x+1}$

(11) $y = \frac{4x+3}{x-2}$

(12) $y = x^3(x-1)^4$