

2年 ___ 科 ___ 番 氏名 _____

★ 次の関数を微分せよ。

(1) $f(x) = \frac{3x - 2}{2x^2 + x + 1}$

(2) $f(x) = \frac{1}{2x^2 + 3}$

(3) $f(x) = \frac{1}{\sqrt[5]{x^8}}$

(4) $f(x) = \sqrt[5]{x}$

(5) $f(x) = \frac{1}{(2x^2 - 3x - 2)^4}$

(6) $f(x) = (x^2 + x)^3$

(7) $f(x) = \sin(x^2 + 2x + 1)$

(8) $f(x) = \cos(3x^2 + 8x + 4)$

(9) $f(x) = \frac{1}{\tan^2(3x - 2)}$

(10) $f(x) = (x^2 - x - 6) \cos(x)$

$$(1) f(x) = \frac{2x^2 + x + 1}{-6x^2 + 8x + 5}$$

$$(3) f(x) = -\frac{\frac{5}{4}x^2}{8}$$

$$(5) f(x) = \frac{(2x^2 - 3x - 2)}{-16x + 12}$$

$$(7) f(x) = (2x + 2) \cos(x) + 2x + 1$$

$$(6) f(x) = -\frac{\cos^2(3x - 2) \tan(3x - 2)}{6}$$

(8)

(9)

$$(4) f(x) = \frac{\frac{5}{4}x^2}{1}$$

$$(2) f(x) = \frac{(2x^2 + x + 1)}{-4x}$$

$$(6) f(x) = (x)^2 + 12$$

$$(8) f(x) = (x)^2 + 8x + 4$$

$$(10) f(x) = (2x - 1) \cos(x) - x - 6 \sin(x)$$