

## 数学 練習問題 (微分・導関数・三角関数の微分)

組 番 ふり がな 氏名 \_\_\_\_\_

1. 次の関数を微分せよ.

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

答 . \_\_\_\_\_

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

答 . \_\_\_\_\_

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

答 . \_\_\_\_\_

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

答 . \_\_\_\_\_

(5)  $y = x \tan x$

答 . \_\_\_\_\_

(6)  $y = \sin x \cdot \cos x$

答 . \_\_\_\_\_

$$(7) y = \frac{\cos x}{\sin x}$$

答 . \_\_\_\_\_

$$(8) y = \cos^4 x$$

答 . \_\_\_\_\_

$$(9) y = \sin(3x^2 + 1)$$

答 . \_\_\_\_\_

$$(10) y = \cos(x^3 - 5)$$

答 . \_\_\_\_\_

$$(11) y = \tan(3x + 2)$$

答 . \_\_\_\_\_