

積分の計算 1 クラス・番号 : \_\_\_\_\_ 氏名 : \_\_\_\_\_

**積分を求めよ**

(1)  $\int (3x + 5)^9 dx$

答 \_\_\_\_\_

(2)  $\int \sqrt[3]{(6x + 1)^5} dx$

答 \_\_\_\_\_

(3)  $\int e^{2x+1} dx \quad (t = 2x + 1)$

答 \_\_\_\_\_

(4)  $\int x(3x^2 + 1)^3 dx$

答 \_\_\_\_\_

(5)  $\int \frac{x + 2}{(x - 1)^3} dx \quad (t = x - 1)$

答 \_\_\_\_\_

$$(6) \quad \int \sin^5 x \cos x \, dx$$

答 \_\_\_\_\_

$$(7) \quad \int \cos^4 x \sin x \, dx$$

答 \_\_\_\_\_

$$(8) \quad \int \sin^3 x \, dx$$

答 \_\_\_\_\_

$$(9) \quad \int \frac{x}{x^2 + 1} \, dx$$

答 \_\_\_\_\_

$$(10) \quad \int \frac{x^5 + x^2}{x^6 + 2x^3 + 1} \, dx$$

答 \_\_\_\_\_