

1. 次の積分を求めよ. 途中の計算式も書くこと.

(1)  $\int (10x + 7)^5 dx$

答. \_\_\_\_\_

(2)  $\int \sin \frac{2x}{3} dx$

答. \_\_\_\_\_

(3)  $\int e^{5x} dx$

答. \_\_\_\_\_

組 番 氏 名 \_\_\_\_\_  
(4)  $\int \frac{x^2}{x^3 + 1} dx$

答. \_\_\_\_\_

(5)  $\int \frac{e^x}{e^x + 3} dx$

答. \_\_\_\_\_

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

答. \_\_\_\_\_

2. 次の部分積分を求めよ.

(1)  $\int x \cos 2x dx$

答. \_\_\_\_\_

(2)  $\int x \sin 7x dx$

答. \_\_\_\_\_

(3)  $\int x e^{2x} dx$

答. \_\_\_\_\_

(4)  $\int x e^{-x} dx$

答. \_\_\_\_\_

(5)  $\int x \log x^2 dx$

答. \_\_\_\_\_