組　　番　氏 名＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿

1. $\displaystyle\int \frac{x}{x^2+1}\,dx$

答 ＿＿＿＿＿＿＿＿＿＿＿＿＿＿

2. $\displaystyle\int \frac{1}{4x^2+9}\,dx$

$\displaystyle\int \frac{dx}{x^2+1} = $ $\boxed{}$ より

答 ＿＿＿＿＿＿＿＿＿＿＿＿＿＿

3. $\displaystyle\int \frac{1}{\sqrt{9-x^2}}\,dx$

$\displaystyle\int \frac{dx}{\sqrt{1-x^2}} = $ $\boxed{}$ より

答 ＿＿＿＿＿＿＿＿＿＿＿＿＿＿

4. $\displaystyle\int \frac{1}{\sqrt{6x-x^2-8}}\,dx$

答 ＿＿＿＿＿＿＿＿＿＿＿＿＿＿

5. $\displaystyle\int \frac{1}{(x+3)(x+4)}\,dx$

答 ＿＿＿＿＿＿＿＿＿＿＿＿＿＿

6. $\displaystyle\int \frac{1}{(x-1)(2x+1)}\,dx$

答 ＿＿＿＿＿＿＿＿＿＿＿＿＿＿

7. 次の部分積分を求めよ.

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

答. _____

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

答. _____

(3) $\displaystyle\int xe^{2x}\,dx$

答. _____

(4) $\displaystyle\int xe^{-x}\,dx$

答. _____

(5) $\displaystyle\int (x+1)\log x\,dx$

答. _____

(6) $\displaystyle\int 5x\log 3x\,dx$

答. _____