

2010		-	
10-	8 :	:	3 :

( 5 ) :

$$U_{n+2} = 2U_{n+1} - U_n : n \quad U_2 = 11 \quad U_1 = 7 \rightarrow (U_n) \quad -1$$

$$e^{V_n} = e^{U_n} \rightarrow (V_n) \quad -2$$

$$S_2 = V_1 + V_2 + \dots + V_n \quad S_1 = U_1 + U_3 + \dots + U_{2010} : \quad ($$

( 5 ) :

$$p(Z) = Z^4 - 2Z^3 + 4Z^2 - 4Z + 4 : \quad p(Z) \quad -1$$

$$p(Z) = (Z^2 + 2)(\alpha Z^2 + \beta Z + \gamma) : Z \quad \gamma \quad \beta \quad \alpha \quad -2$$

$$p(Z) = 0 : \quad \mathbb{C} \quad -3$$

$$\left(\frac{Z_1}{\sqrt{2}}\right)^{1000} + \left(\frac{Z_2}{\sqrt{2}}\right)^{1000} + \left(\frac{Z_3}{\sqrt{2}}\right)^{1000} + \left(\frac{Z_4}{\sqrt{2}}\right)^{1000} : \quad -4$$

$$\left(\frac{Z_1}{\sqrt{2}}\right)^{1000} + \left(\frac{Z_2}{\sqrt{2}}\right)^{1000} + \left(\frac{Z_3}{\sqrt{2}}\right)^{1000} + \left(\frac{Z_4}{\sqrt{2}}\right)^{1000} : \quad -5$$

( 10 ) :

$$f(x) = e^x - x : \quad \mathbb{R} \quad f \quad (I)$$

$$g(x) = \ln(e^x - x) : \quad \mathbb{R} \quad g \quad (II)$$

$$(O; \vec{i}, \vec{j}) \quad (C_g)$$

$$g \quad -1$$

$$g \quad -2$$

$$g \quad -3$$

$$g(x) = x + \ln(1 - xe^{-x}) : \quad g(x) \quad -4$$

$$\cdot (C_g)$$

. 1

$$(\Delta)$$

$$(C_g)$$

-5

$$\cdot (\Delta) \quad (C_g)$$

$$g(2)$$

$$g(1)$$

$$g(-2)$$

$$g(-1)$$

-6

:

$$(\Delta)$$

$$(C_g)$$

$$m$$

-7

$$\cdot y = x + m$$