

$$\textcircled{51}、\varphi_2(a, b) = \varphi_2(a, b) = \varphi(a, b) = 0 \text{ である。}$$

$$F(x, y, \lambda) = xy + x + y + \lambda((x-1)^2 + (y-1)^2 - 1) \quad x, y, \lambda$$

$$F_y(a, y, \lambda) = y + \sqrt{1 + 2\lambda(\alpha - 1)} = 0 \quad \text{--- ①}$$

$$F_y(x, y, \lambda) = x + 1 + 2\lambda(y - 1) = 0 \quad - (2)$$

$$F_A(x, y, \lambda) = (x-1)^2 + (y-1)^2 - 1 = 0 \quad (3)$$

$$\textcircled{1} \times (\beta - 1) - \textcircled{2} \times (\alpha - 1) \quad f_1)$$

$$y^2 - x^2 = 0$$

$$x^2 + 2\lambda x - 2 = 0$$

57, ③ (57)

$$2(a-1)^2 - 1 = 0 \quad \text{または} \quad 2a^2 + 1 = 0$$

$$d, 7. \quad (d, g) = \left(\frac{2\sqrt{2}}{2}, \frac{\pm \frac{3\sqrt{2}}{2}}{2} \right), \left(\frac{2\sqrt{2}}{2}, \frac{\pm \frac{2\sqrt{2}}{2}}{2} \right) ;$$

$$\text{其 } \textcircled{1}, \textcircled{2} \text{ 为 } (x, y) = \left(\frac{1+i\sqrt{2}}{2}, -\frac{1-i\sqrt{2}}{2} \right), \left(\frac{1-i\sqrt{2}}{2}, -\frac{1+i\sqrt{2}}{2} \right) \text{ 为 } \sqrt{2} \text{ 的根}$$

入が決定した1072不通。

また、 $\varphi(x, y)$ は Γ で "おろし" である。

$$\frac{1}{2} \left(\frac{2-v_1}{2} + \frac{2-v_2}{2} \right) = \frac{1-v_1+v_2}{2}$$

21. 最大値 $\frac{1-n_2}{2}$ //

$$5. \quad x + y + z = 1 \quad \text{f.i.)} \quad z = 1 - y - x \quad - \textcircled{1}$$

$$2\lambda^2 \quad a + 2c + 32 \quad k = 4 \cdot \lambda \cdot L7.$$

$$x + 2y + 3 - 3y - 3x = -2x - y + 3 = 0$$

$$\therefore y = 3 - 2x$$

$$\textcircled{1} \text{ 代 } \lambda \text{ 入 } \quad \bar{x} = x - 2$$

$$d, 1. \quad x^2 + y^2 + z^2 = x^2 + y^2 + x^2 - 4x + 4$$

$$= 62 - 162$$

$$g'(x) = 12x - 16$$

$$= 4(3x - 4)$$

$$g'(x) = 12 > 0 \text{ f'') } \alpha = \frac{2}{3} \text{ 12 不通过、通過}$$

$$g\left(\frac{y}{3}\right) = \frac{y^2}{3} - \frac{6y}{3} + 13 = \frac{y^2}{3} - 2y + 13$$

$\frac{1}{2} \times \frac{1}{2} = \frac{1}{4}$
 $\frac{1}{4} \times \frac{1}{4} = \frac{1}{16}$
 $\frac{1}{16} \times \frac{1}{16} = \frac{1}{256}$
 $\frac{1}{256} \times \frac{1}{256} = \frac{1}{65536}$
 $\frac{1}{65536} \times \frac{1}{65536} = \frac{1}{4294967296}$
 $\frac{1}{4294967296} \times \frac{1}{4294967296} = \frac{1}{18446744073709551616}$
 $\frac{1}{18446744073709551616} \times \frac{1}{18446744073709551616} = \frac{1}{340282366920938463463374607431768211456}$
 $\frac{1}{340282366920938463463374607431768211456} \times \frac{1}{340282366920938463463374607431768211456} = \frac{1}{11579208923731619542857098500868094069445696478485646868680858216446662646866267321272522629250016599986196664689413265329846651218602412964199689626467272276996296256206977502163992162966542181979792384561929289221796989991566601682262050390697723751953062118616369098472690467291565127814565426593061486294166214881128673148792643268381194974295698247814767287652864596482594142037327790641997629505621396954274426091568145661274353682569396862741764784896861994250664897029778060577077676565061486034332716214684982504848616364242316069834664980839238867087822323887474679872643207415628825267536273420107561395717176768179847981530724677240387187132673541152644793226912961$

$\frac{1}{\sqrt{2}}$

57. \vec{r} 小徑 $\frac{1}{3}$ (a, b, c) = $(\frac{4}{3}, -\frac{1}{3}, -\frac{1}{3})$

6. 西區行政中心

$$2x + 2z \cdot \frac{\partial f}{\partial x} + 1 + 3 \cdot \frac{\partial f}{\partial z} = 0$$

$$(2x+3) \frac{\partial f}{\partial x} = -(2x+1)$$

$$\frac{\partial f}{\partial a} = - \frac{2a+1}{2a+3}$$

51-1011 子偏微分

$$-\frac{\frac{\partial^2 f}{\partial x \partial y}}{\frac{\partial^2 f}{\partial x^2}} = -\frac{2(2x+1)}{(2x+3)^2} \cdot \frac{\partial f}{\partial y} \quad -\textcircled{D}$$

新式と微細な

$$= 0 \quad \frac{29}{29} + 2 + 3 \frac{29}{29}$$

$$\frac{dy}{dz} = -\frac{2(y+1)}{2z+3}$$

$$x_2 \quad ① = 17$$

$$\frac{\partial^2 f}{\partial x \partial y} = \frac{2(2x+1)}{(2x+3)^2} - \frac{2(y+1)}{2x+3}$$

$$= - \frac{4(2x+1)(y+1)}{(2z+3)^3}$$