

We use rt-5 method:

Frem (x14,2)=0, == 3a-x-y

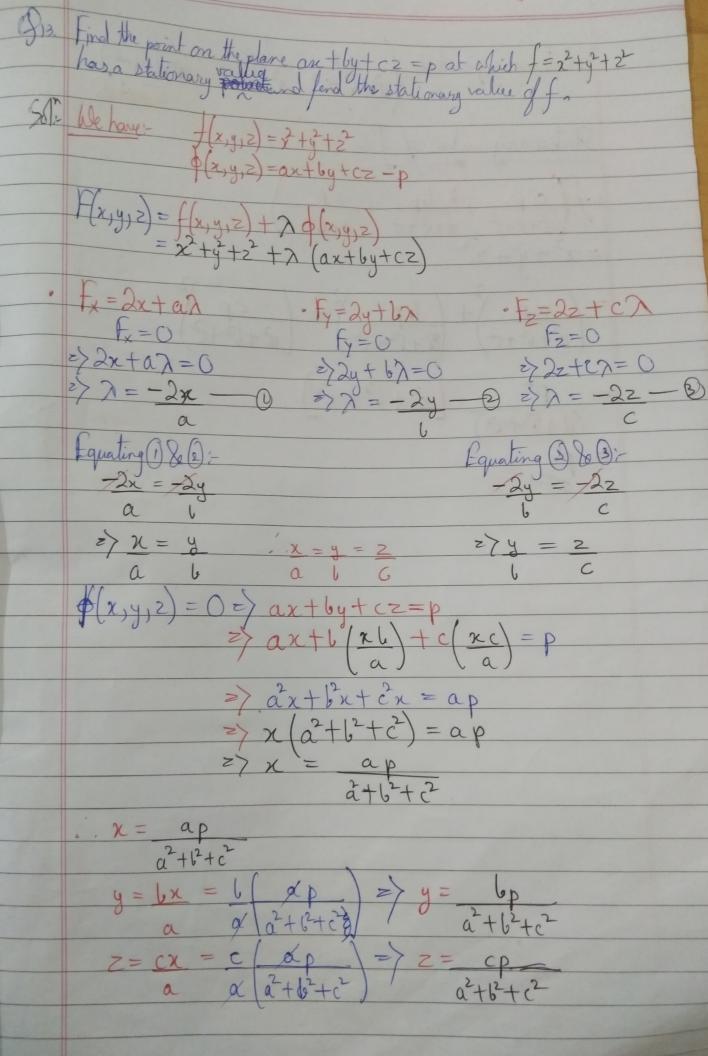
 $f(x,y,z) = x^2 + y^2 + (3a - x - y)$

 $\frac{1}{2} = \frac{1}{2} \left(\frac{1}{2} + \frac{1}{2} + \frac{1}{3} \frac{1}{3} - \frac{1}{2} + \frac{1}{2} \left(\frac{1}{3} - \frac{1}{2} + \frac{1}{2} \right) \right) = 2 + \frac{1}{2} \left(\frac{1}{3} - \frac{1}{2} + \frac{1}{2} + \frac{1}{3} + \frac{1}{3} + \frac{1}{3} + \frac{1}{2} + \frac{1}{3} + \frac{$

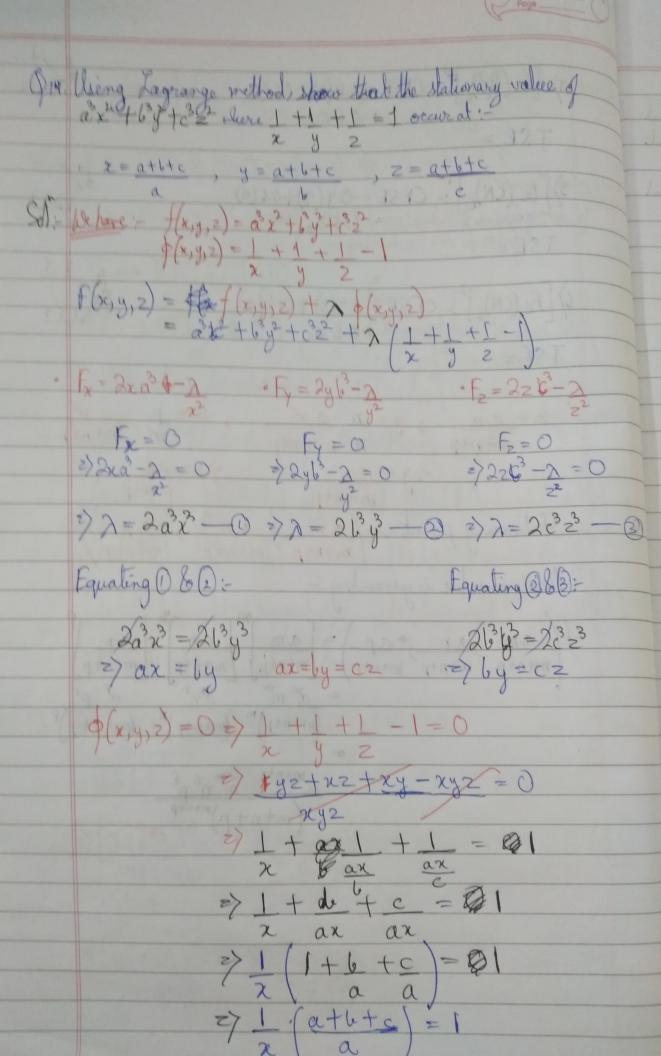
Here, $f_{yy} = 2 - 2(-1)$ = 7 + = 4 $p_{y} + 5 = (4)(4) + (2)^{2} = 16 - 4 = 12 > 0$ & y = 4. Minima at $(a_{y}a_{y}a_{y})$ & No Maxima

Minimam value = fla, a, a

 $=2x^{2}+y^{2}+2^{2}$ $=a^{2}+a^{2}+a^{2}$



Stationary point is ap, 6p, cp at 12+22 Stationary value of f: $= \frac{1}{(a^2+b^2+c^2)} \frac{1}{(a^2+b^2+c^2)} \frac{1}{(a^2+b^2+c^2)} \frac{1}{(a^2+b^2+c^2)}$ $= (ap) + (bp)^{2} + (cp)^{2}$ $(a^{2}+b^{2}+c^{2}) + (a^{2}+b^{2}+c^{2})$



=/x = a+b+cy = axandrig during as & = afatbtc) b => y = a+b+c desirber pour a set point and wiests there z = ady= d(a+6+c). $\frac{\partial R}{\partial t} = \frac{a+b+c}{c}$. Stationary value of f(x,y,z) ocurs at:-(at6+c, at6+c, at6+c)