| 22 H CBOUCTBA HA ABYRPATHUTE NHTETPANN  |
|---|
| DARO G e uzuepino no Maggan misoliceciales b.R2, uo   |
| $w(G) = \iint 1 dx dy$ .  |
| Df(x,y) u g(x,y)-univerpyenu no Hopgan unodecevileo GCIR².  = 1) (f+g/x/y) univerpyena bopxy 6 u SS(f+g)(x,y)= Sfdxdy+ Sgdxdu   |
| 2)(lf)(x,y)=lf(x,y), le R-unviezpyena bopxy 6 u   |
| Il If(x,y)dxdy = Afffdxdy,  |
| Bilko $f(x,y)$ e neoripuyanienna u univerpyena loopxy usupu-<br>monto no Morgan unosteanto $GCR^2 = \int \int f(x,y) dx dy \ge 0$ .   |
| Caequille. Ako $f(x,y)$ u $g(x,y)$ ca universelem beoxy usue- princtio no Mossgan unolucido GCR u $f(x,y) \ge g(x,y)$ beoxy $G$ $= 0$ $\int f(x,y) dxdy \ge \int g(x,y) dxdy.$  |
| A) Aleo f(x,y) e univerpena lorepxy usueprincito no Mopgan<br>unoxicectuleo GCR2=V [f(x,y)] e univerpenea lorepxy 6. Vipu uro-  |
| ber   [[f(x,y)dxdy] \le [(1f(x,y))dxdy  |
| 5. Aleo f(x,y) e univerpriera bopxy 6 u be aprilio variante.  |
| Θλέο $f(x,y)$ ε υπωτεργενα βτρχη $G$ α $G'$ ε μπατρήση α θτρχη $G'$ .<br>λία υπόρ μα $G$ , το $f(x,y)$ ε υπωτεργενα α βτρχη μπατρήση πο λίοργαμ πησλίας<br>Θλέο $f(x,y)$ ε υπωτεργενα βτρχη μπατρήση πο λίοργαμ πησλίας<br>τοδο $G$ α $G = G$ , $UG_2 : G$ , α $G_2$ α α αγπερήμα α $G$ , $G_2 = \emptyset$ . |
| =D $\iint f(x,y) dxdy = \iint f(x,y) dxdy + \iint f(x,y) dxdy$  |

Фонека f(x,y) е непревосната ворху изперимонно компакино вър-зано мно жество GCPC. Пполова стеществува  $(x_0,y_0) \in G$ :  $\iint f(x,y) dxdy = f(x_0,y_0) \cdot m(G)$ . D) f(xo,yo)= 1 [[f(x,y)dxdy-cpExHA croinHoct HA f(x,y) B/Y G. Dekaraissenciu 60:  $f(x_iy)$ - Hempekschange Gepxy G, koemo e komakanto =>  $\Rightarrow \exists (x_i,y_i) \ u(x_i,y_i) \ ou G:$   $\forall (x_iy_i) : f(x_i,y_i) \in f(x_i,y_i) \in f(x_i,y_i)$ =D  $\iint f(x_i, y_i) dxdy \leq \iint f(x_i, y_i) dxdy \leq \iint f(x_i, y_i) dxdy$ =  $D = f(x_i, y_i) \cdot u(G) \leq \iint f(x_i, y_i) dxdy \leq f(x_i, y_i) u(G)$  $\Rightarrow f(x_i,y_i) \leq \frac{1}{u(G)} \iint f(x,y) dxdy \leq f(x_i,y_i)$ 6-clorepround = > ](xo,yo) 66: |f(xo,yo) = 1 ||f(xo,y) dxdy