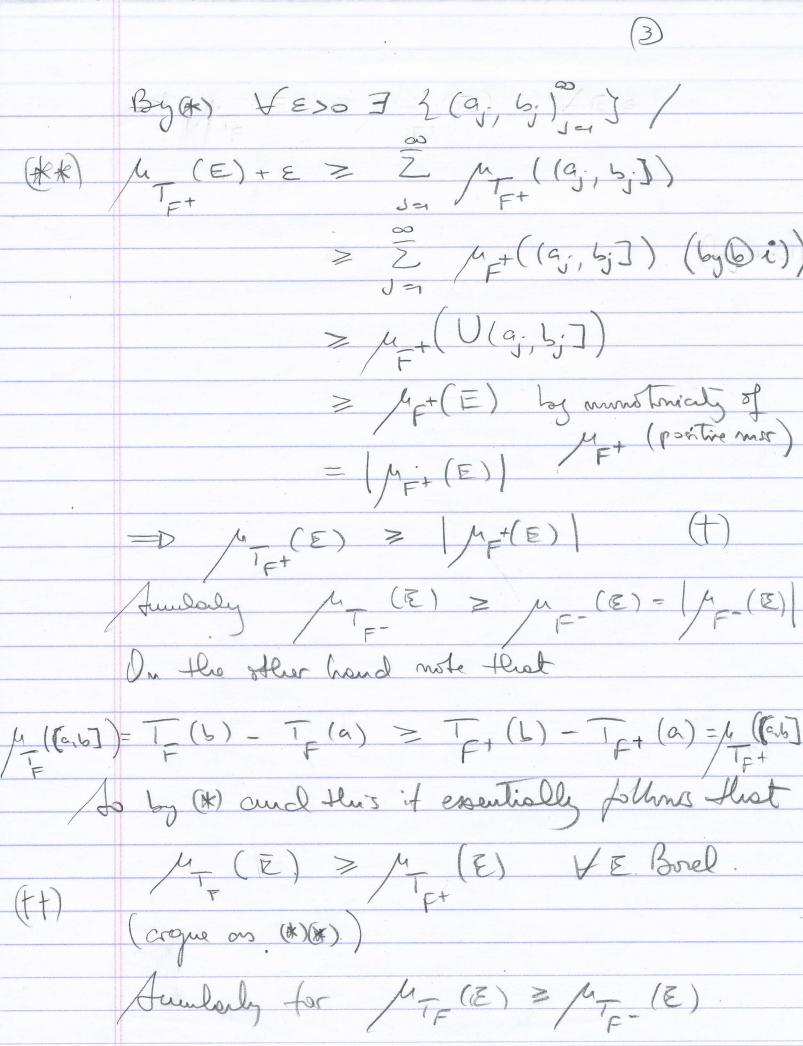
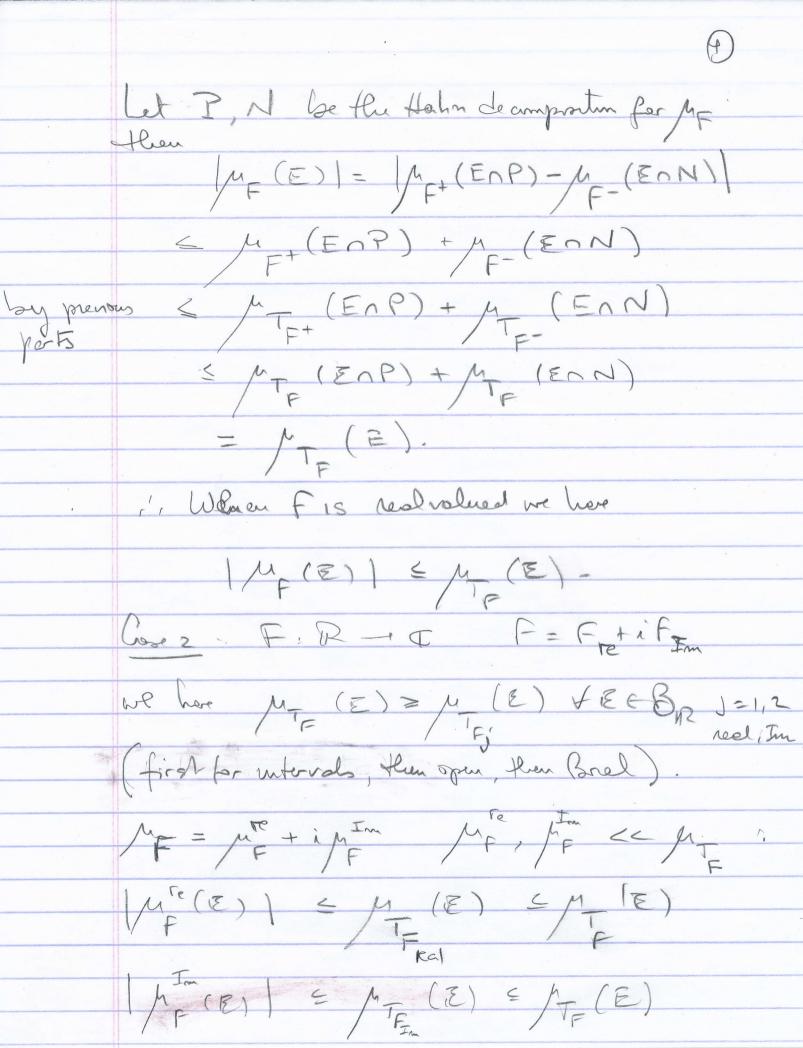
NOTE: NOT THE ONLY WAY OF DOING IT !!
#28: If F E NBV, Let G(x) = / / [(-00, x])
Prove [Mp] = M_F by shiring that G = TF:
G = G:
By Th. 3.28 FENBV-PJ! complex Brel measure MF / F(x):= MF ((-00, x])
ForexeR and any partition - 00 <x0<x, 2="" <xx="X</td"></x0<x,>
$\frac{1}{2} F(x_j) - F(x_{j-1}) = \frac{1}{2} M_F((-\infty, x_j)) - M_F((-\infty, x_{j-1})) $ $\int_{-\infty}^{\infty} F(x_j) - F(x_{j-1}) = \frac{1}{2} M_F((-\infty, x_j)) - M_F((-\infty, x_{j-1})) $
$=\frac{1}{2}\left[\int_{\Gamma}\left(-\infty,\times;-\right]+\int_{\Gamma}\left(\left(\times;-,\times;-\right)\right)-\int_{\Gamma}\left(-\infty,\times;-\right)\right]$
$= \sum_{j=1}^{n} \left(\left(x_{j-1}, x_{j}^{*} \right) \right)$
$\leq \frac{1}{2} \left \int_{\mathbb{R}^{2}} \left[\left(\left(X_{j-1}, X_{j} \right) \right) \right] \right P \cap P = 3.13 a$
= [MF] ((D) (x; x;])
$= \mathcal{M}_{F} ((\times_{o}, \times_{J})$
Hence T _F (x) & sup -00 < x ₀ < x / f (x ₀ , x _J)
$= -\infty < x_0 < x $ $= / [(-\infty, x]) = G(x).$

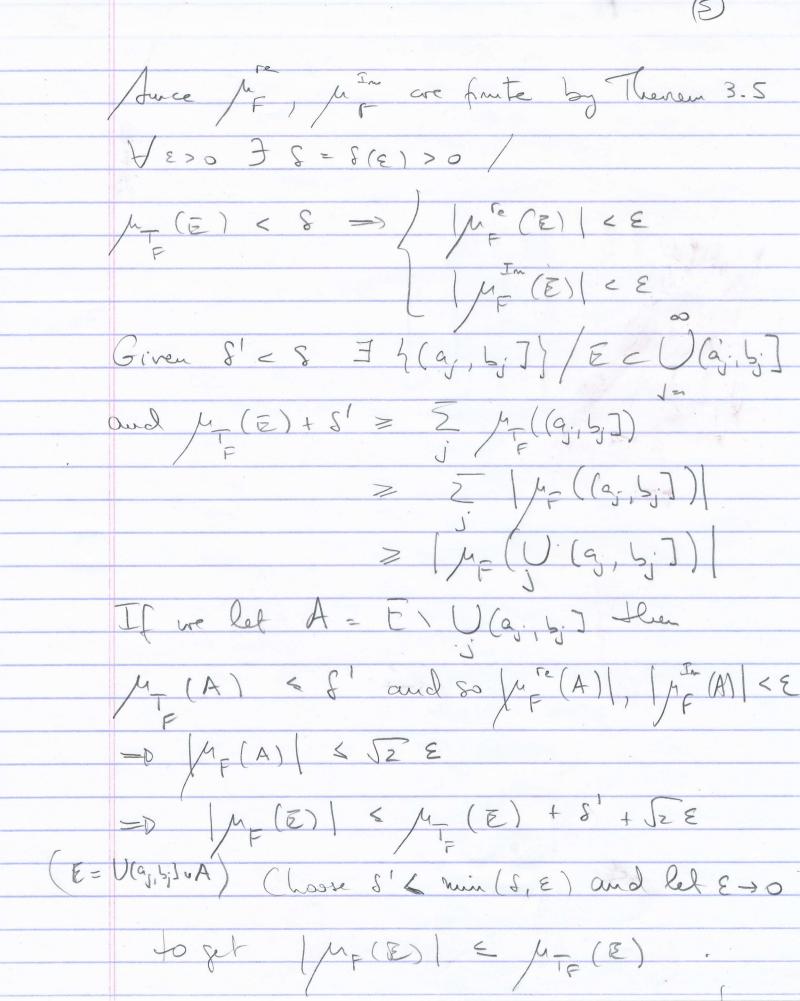
(b) For any Borel E | M= (E) | = /= (E) (i) We prove this When E = (a, b], b< 00 first MF(E) 1 = MF((a, 5]) = | F(b) - F(a) | (Some as in proof of Lemma 3.26) M- ((a,b]) (ii) Ampose E E BR then since 1 15 = portre Barel messure (#) $\mu_{-}(E) = \inf \left\{ \frac{2}{2} \mu_{+}((a,b;J); U(a;b;J)E \right\}$ Case 1: F: R - R (real valued) Write F= = = (TF+F) - = (TF-F) =: F+ =: F
Each F+, F- 15 real valued, portre increasing

=> gives note to proper printing Bred

Th. 1.16 measures / ME = ME+ - MEdo consider 1/4+ (for example, 1/2- 15 similar)







(C) By Exercise 21

 $J_{\mu_{\mathcal{E}}} \uparrow (\Xi) = \sup_{\Sigma = 0} \frac{1}{\Sigma} [\mu_{\mathcal{E}}(\Xi)] = \sup_{\Sigma = 0} \frac{1}{\Sigma} [\mu_{\mathcal{E}}(\Xi)] = \sup_{\Sigma = 0} \frac{1}{\Sigma} [\mu_{\mathcal{E}}(\Xi)]$

MF(E)) = MF(E)

=> = / (E) | = / (E)

by toly sup set | m 1 = / F

1. G = T