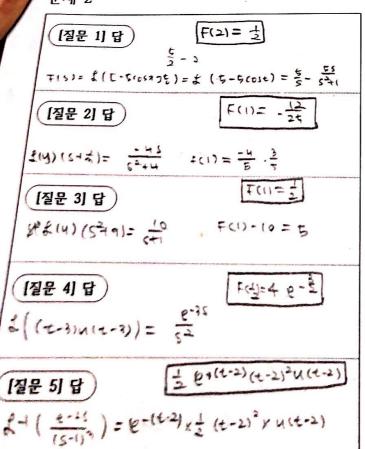
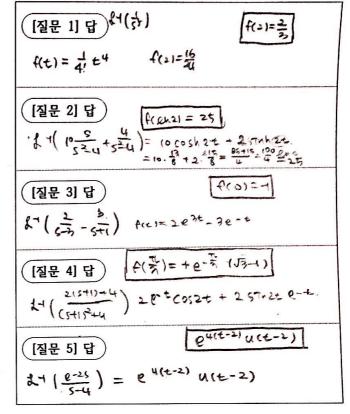
문제 1

(12++1) [질문 1] 답 (F(ア) = ロ (F(ア) = ロ	
[질문 2] 답) F(S)= 3 F(S)= 3 F(S)= 16	
[질문 3] 답 F(4)= - 1 F(4)= - 2	
[질문 4] 답) F(2)= + SH = SH F(2) = + 8	
[질문 5] 답 (S-31 ² +1	

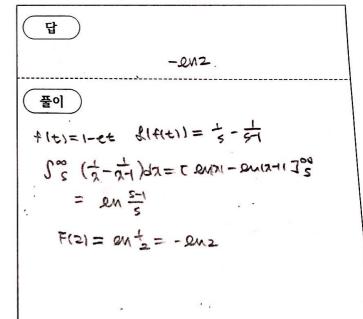
문제 2



문제 3



문제 4



문제 5 f(t)= 500 ce(1-t) tracec.

답

1 2

풀이

 $f(t) = \int_{0}^{\infty} \int_{0}^{\infty} e^{t} c_{T} dt \cdot e^{-t} dt$ $= \int_{0}^{\infty} \left(\sqrt{L} e^{t} c_{T} dt \right) = -\left(\frac{1}{(t_{1})^{2} + 1} \right)^{2}$ $f(e^{t} c_{T} dt) = \frac{1}{(t_{1})^{2} + 1} = \frac{2t - 2}{(t_{2}^{2} 2t + 2)^{2}}$

 $f(2) = \frac{2}{(4-4+2)^2-2}$

문제 7 f(+)= f(en(5+ +)) f(r)?

답

当た

置の $F(s) = Q_{h}(s^{2}+1) - Q_{h}s$ $F(s) = \frac{2s}{s^{2}+1} - \frac{1}{s}$ $J(F(s)) = 2\cos t - 1 = -tf(t)$ $f(t) = \frac{(-2\cos t)}{t}$ $f(\pi) = \frac{3}{\pi}$

문제 6

답

J3 - Th

置り h(t)=より(シュー) xとり(シュー)
= 251nt * 255nt

= 4 $\int_{0}^{t} \int_{0}^{t} \int_{0}^{t}$

か(者)=-2(音-夏)=-まなる

문제 8 七g"+(-七)g'+g=0. F(s)=도(u)

답

 $F(4) = \frac{2}{16}$

置0 -25F-52F1+5F+F75F1+F=0

(-S+5) F14 (-2+5) F =0

ent = +en15-11 + 2 ens

 $F(S) = \frac{S-1}{S^2}$, $F(4) = \frac{3}{16}$

 $\frac{F'}{F} = \frac{s-2}{s(1-s)} = \frac{-s+2}{s(s-1)} = \frac{6}{5}$

0-6=-1 as-6(s-1)=-s+2

a= -1

4" + 9 uz 5 (1 - 2)

문제 9

답

千

품이

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

문제 11

ニュレーき)ームロ(デ)ー4

풀이

$$S^{2} \mathcal{L}(q) = 2s + 9\mathcal{L}(q) = \frac{1}{6} (8(6-\frac{1}{6}))$$

$$\mathcal{L}(q) = \frac{1}{6} \frac{1}{3} + 2s$$

$$\mathcal{L}(q) = \frac{1}{6} \frac{1}{3} + 2s$$

り(気)ナリ(な)=-ない(を)-ないを)ーナ

문제 10

[질문 1] 답

(0,2), (4,-2)

[질문 2] 답

O (0,2) + Dtz (%

@ (4,-2)+957878

풀이

1 6,1= y,(4-41) (012) (41-2) 42'= 42+41-2

D(D(2) → Y,1= 44,-4,2 844, (40) 41 = 42+41-2

brung

P>0 870 670

@(4,2)+ 4,1=4(9,+4)-(9,+4)2 =-9,2-67,

4st = 43+41-2

8, = 4,-4

(-4 0)

opper peo quo

임서경

12201944 4

6

3

y111=20 문제 12 24114 C1-22)41+ C2-14=0. 41(1)=3e

답

02 (2+en2)

置の) ト(オ)=1-シメ、ハカノマ(ノー) b(01=1, (101=0) K(K-1) 4 x = 0. K=0

y - \(\frac{\infty}{\infty} \) am xm . y' = \(\frac{\infty}{\infty} \) m am xm y' = \(\frac{\infty}{\infty} \) m(m+1am1m2

= m (m-1) an xm-1 + = mam xm-1 - 2 = mam xm 4 \sum_ am x = 0

I (m+1) man, 2m + I amil 2m (m+1) - 2 m am2m + Dama 2n - Daman =0

(-a+ a1)+ = xm ((m+1) an+ - curil an+ an+)=0

(m+11 2 (9m+1 - m+1) - m (9m - 9m+) == [m 21)

7 (m+112 bm+1 - mbm=0

 $b_{m+1} = \frac{m}{(m+1)^2} b_m$

bong = ang - an =0

anti = an - an = ao

Y = e2

14244 42= e Se-27 . e22 . \$ 47

= e 2 eu 2

y=c, e2 + & zenz y'=c, ex

 $t_1 = 2e^2 + e^2 e^2$ $C_2 = 1$ $t_2 = 2e^2 + e^2 e^2$ $C_2 = 1$

1(2)= 2 e 2 + EIM2

문제 13

학범

답

晋이 村1) a dy = (y+x→)dn

(4+2)67-294=0

ethronisty x

() $f_{x} = f_{x}'(-x) - f_{x}$, $2f_{x} = f_{x}'(-x)$ $\frac{41}{60} = -\frac{2}{3}$ $f_2 = \frac{1}{32}$ $(3\frac{1}{2}+1)in-\frac{1}{3}dy=0$

 $y' = \frac{1}{2} + x$ $y' = \frac{1}{2} + x$ $y' = \frac{1}{2} + x$

4'=1 14=x+C

y= x2+Cx + c(,2)+c=1

(x=2) y= 4+2=6

LL 저지하게 시험에 응합 것을 서약합니