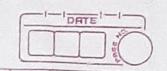
	DATE
	NMA Assignment 1
Q1)	$\delta = 12.65 \text{cm}$ $\delta = 12.5 \text{cm}$
	A. F = 8 = -8 = 12.65-12.5 = 0.15cm
	R.E = E0008 = 0.15 = 0.012 $8$
Q2	x $f(x) = log xy$ $0.60206y$ $0.6532125y$ $y$ $0.7403627y$ $y$ $y$ $y$ $y$ $y$ $y$ $y$ $y$ $y$
1)	$\frac{x-x_1}{x_1-x_2} - \frac{y-y_1}{y_2-y_2}$
	4-6 0.60206 - 0.7781513
	y = 0.69010565



2) X-X1 = y-y1 X1-X2 - y1-y2

> 1.5-4.5 = y - 0.6532125 4.5-5.5 0.6532125 - 0.7403627

· y = 0.6967876

a=1.5, b=2

x y 1.5 -6.4375

O: X6= >(1+ ×2 = 1.5+2 = 1.75

y = -2.37109

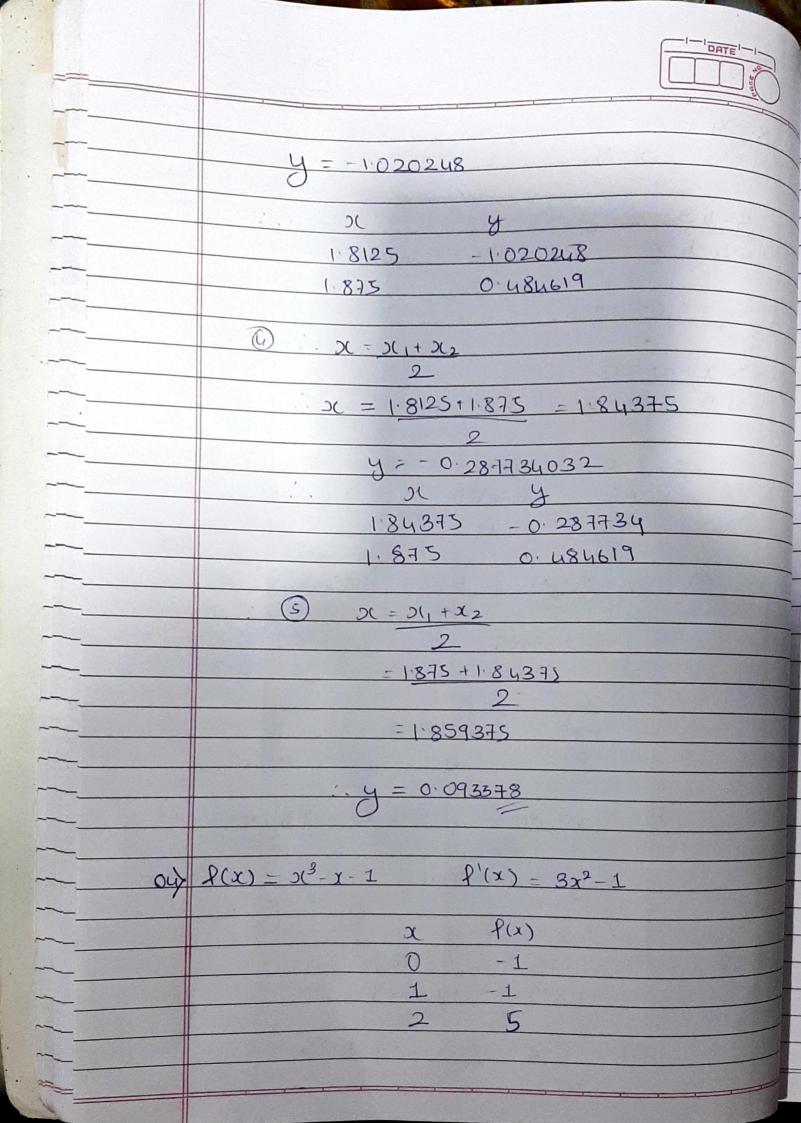
1.75 -2.37109 2 4

 $0 \cdot x = x_{11}x_{2} = 1.75+2 = 1.875$   $2 \quad 2$ 

y = 0. 484619141

1.75 -2.37109 1.875 0.484619

 $\frac{3}{x} = x_1 + x_2 = 1 - 8125$ 



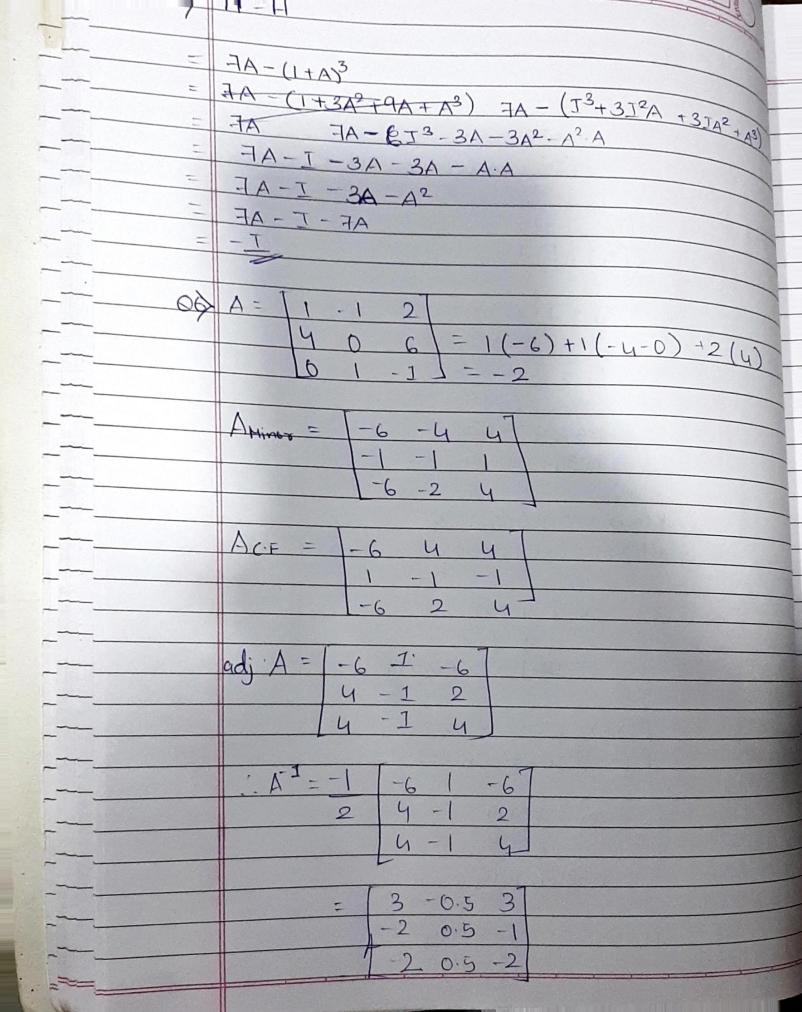


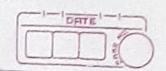
$$X_1 = 1 - (-1)$$
2
= 1 + 1
2

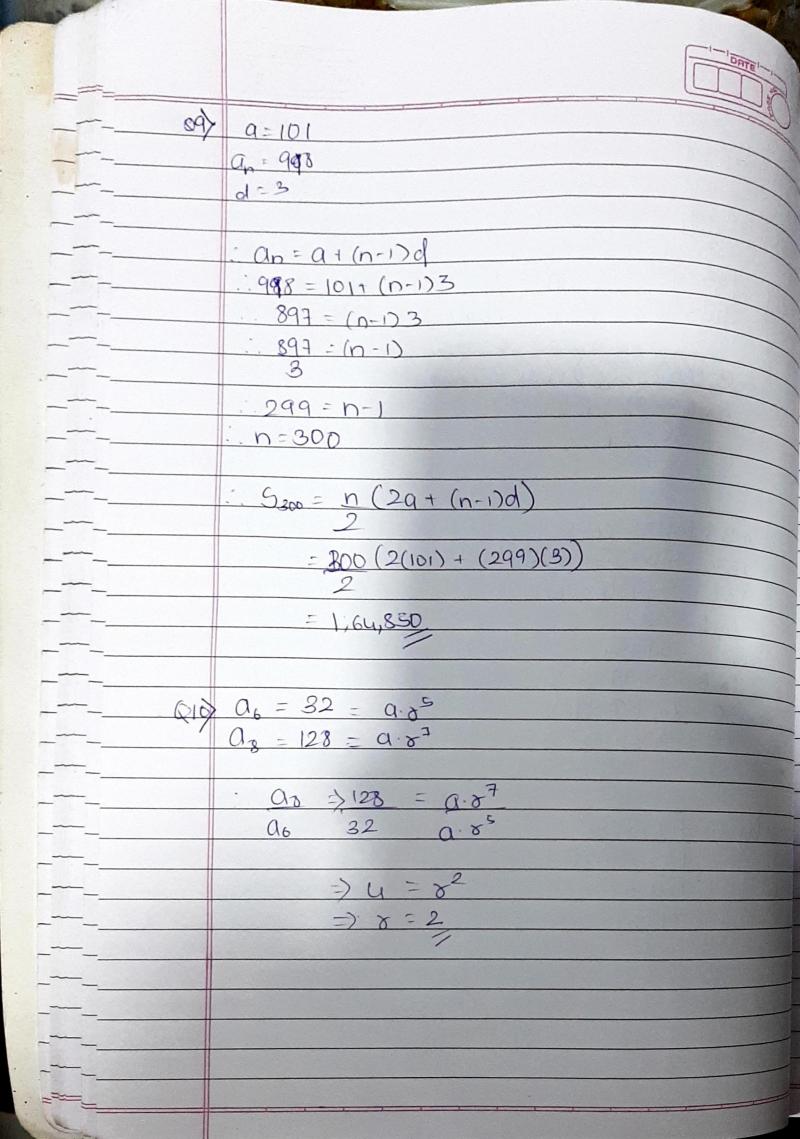
$$\chi_{4} = \chi_{3} - f(\chi_{3})$$

$$f'(\chi_{3})$$

8(xu) = 0.000000924





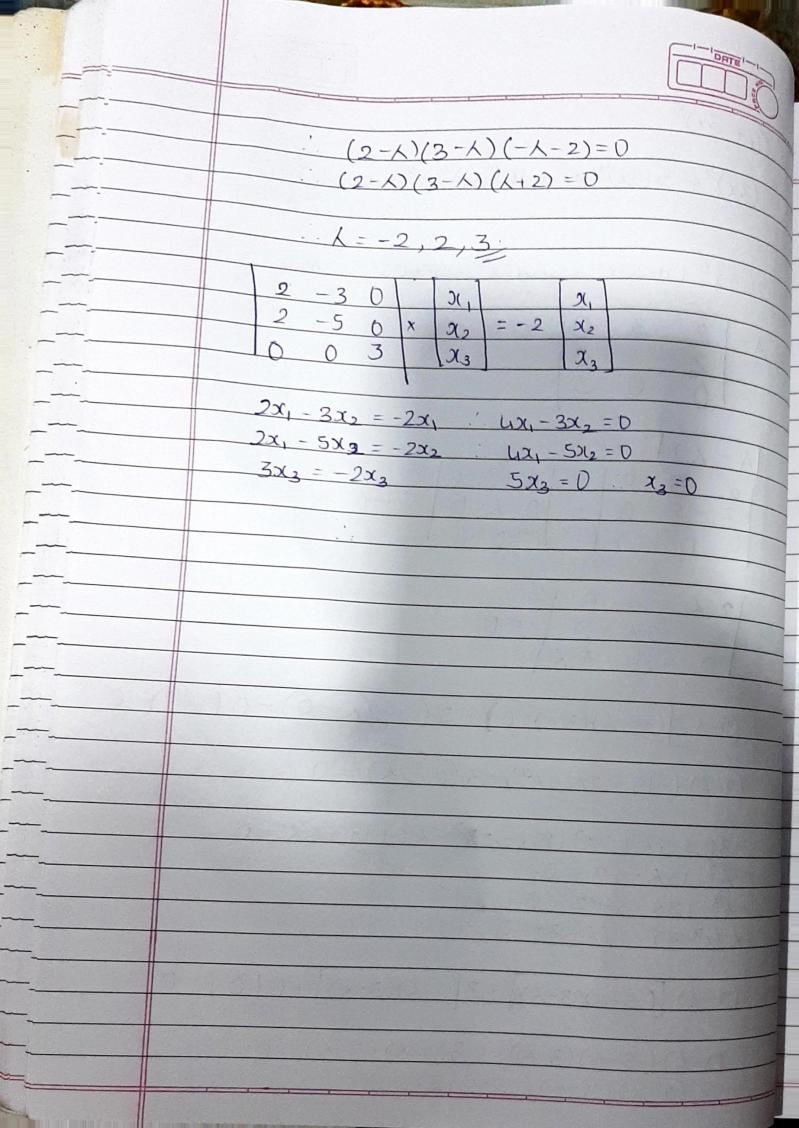




$$(3x)^5 + 5(3x)^6(4) + 10(3x)^3(4)^2 + 10(3x)^2(4)^3$$
  
 $+ 5(3x)(4)^4 + (4)^3$ 

2 43x + 1620x + 44320x + 5360x + 3840x + 1024

$$(3-1)(-5-1)(3-1) + 3(2-1)(3-1) = 0$$
  
 $(3-1)(3-1)(-5-1) = 0$ 





$$= [x^2 + (1-x)]^4$$

$$= |x^8 + 4(x^2)^3(1-x) + 6(x^2)^2(1-x)^2 + 4(x^2)(1-x)^3 + (1-x)^4$$

$$= 3(8 + 4)x^{6}(1-x) + 6x^{4}(1-x)^{2} + 4x^{2}(1-x)^{3} + (1-x)^{4}$$

$$= 10^{8} + 400^{6} - 400^{7} + 600^{4} - 1200^{5} + 600^{6} + 400^{2} (1 - 300 + 300^{2} - 00^{3})$$

$$+(1-4x+6x^2-4x^3+x4)$$

$$3(^{8} + 4x^{6} - 4x^{7} + 6x^{9} - 12x^{5} + 6x^{6} + 4x^{2} - 12x^{3} + 12x^{4} - 4x^{5} +$$

= x3-40x6-16x5+19x4-16x3+10x2-lay Q15 e-x = 3 logx e-x-3.10921=0 x g(x)2 -1.944106258 1 0.367879441 6. 20=2(1+262 - 2+1 - 1-5 f(x) = -0.9932651641.5 -0.993265164 1 0.367879441 6 , 2(= 2(1+26) = 1.5+1 = 1.25 2 2 e(x) = -0.382925857 X y 1.25 -0.3829 1 0.3678 (3) x=x1,+x, 1:28+1 = 1:125 f(x) = -0.02869



1.125 -0.02869 1 0.3678

 $0 \quad x = x_1 + x_2 = \frac{1!12s + 1}{2} = \frac{1'0625}{2}$ 

8(x) = 0163716887

x = 1.0625