## **U-ERRE**

## Universidad Regiomontana

Métodos Numéricos

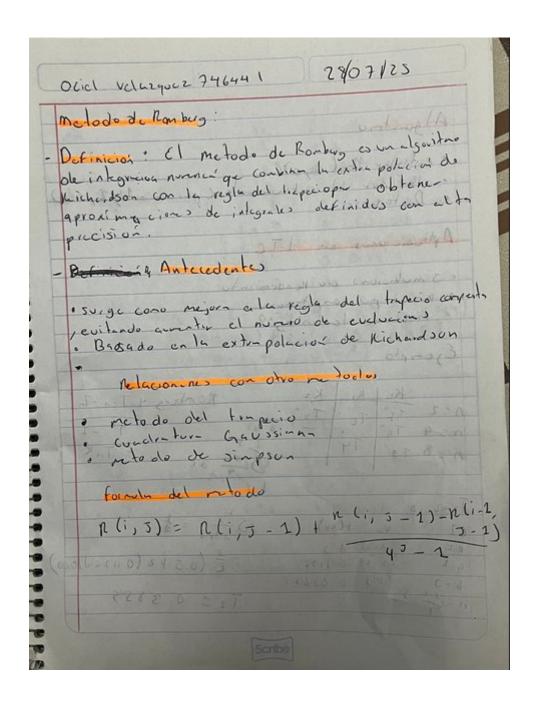
**Tercer Parcial** 

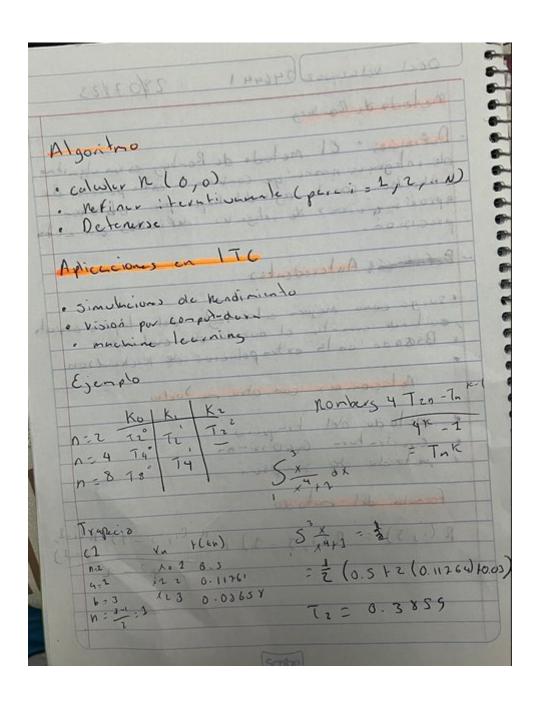
Reporte del Método de Romberg

Coach: Sergio Castillo

Oziel Misael Velazquez Carrizales 746441

Fecha de entrega: 28/07/2025





```
5 + Xn ) SF (xa) as
                10 1
a = 1
                1115 0.24742
b = 3
               12 0.11764
                Lo 3.5 00.0624 0
                143 6.03654
                X 5 3 5 0 . 0 2 316
                      0.01336
       (0.s+2(0.24742)+2(0.11764)
      12(0.0624) +2(0.03658)
      t2 (0.02360) + 0.01556)
   74 = 0.3478
                     f (In)
                 Xu 0
 n = 8
                      0.5
                 1
                      320/881
                 (4.1)
                1.3
                      24/42
 h = 3-1 = 0.23
                      444/2657
                1.73
                      2/12
                 2.0
                      576/6317
                2,50
                       40/641
                       704/14892
                 2-75
                        3/82
```

```
750 = 0.25 (0.5+2 (320)+ 2 (24) 12 (44x)
+2(3) +2 (576) +2 (40) +2 (204 )+3/12)
 - 0.33983
 Ti = 4 Ty - Ti = 4 (0.347) - 0.3454
     = 0.335)
```

Funcion: F (x) = In (42 -44) irturo: a = - 3, b = 3 53 IN (4 x2 +4) dx rapecio: Ti Ti~ 22.1334 72 2 15.2256 Ty = 11.4602 742 10.5829 4. L; 11,1-T2,2 4.1; +1, 1-T3,2 In = 4.15.2256 - 22.1334 = 60.724 -22.1334 38.76 ~12.723 2 y T3 Ta 12 = 4. 11.4602-15.2256 = 45.140 1 -15.2254 30.61 11 1 2 10.205

TEVES Eurian ( (1) = In (42 44) T3 y T4: 1 3,2 = 4.10.5829 - 11.4602 42.3316-11.4102 = 30.8714 = 10.240 Columna 3 11,3 = 47. I 511,2- II, 2 - 16, 1, 1,2- 15, 3 I,,2 y 12,2 I 1,3 = 16.10205 - 12.423 = 163.27 - 12.923 - Iso. 357 ~ 10.024 12,24 Is,2 12,3 = 16.10.290-10.205 - 164.64-10.205 = 154.413 = 10.296

Autorit.		
3/10		6
I.,4=	43. I2,3-12,3 64.10.296	
	= 658.944-10.024	647.96
	~ 10.302	1