Nombre de alumno: Damaris Gabriela Pérez Santizo

Nombre del profesor: JORGE ENRIQUE ALBORES AGUILAR

Nombre del trabajo: DATOS AGRUPADOS CALCULOS

Materia: ESTADISTICA DESCRIPTIVA EN NUTRICION

Grado: 3

Grupo: A

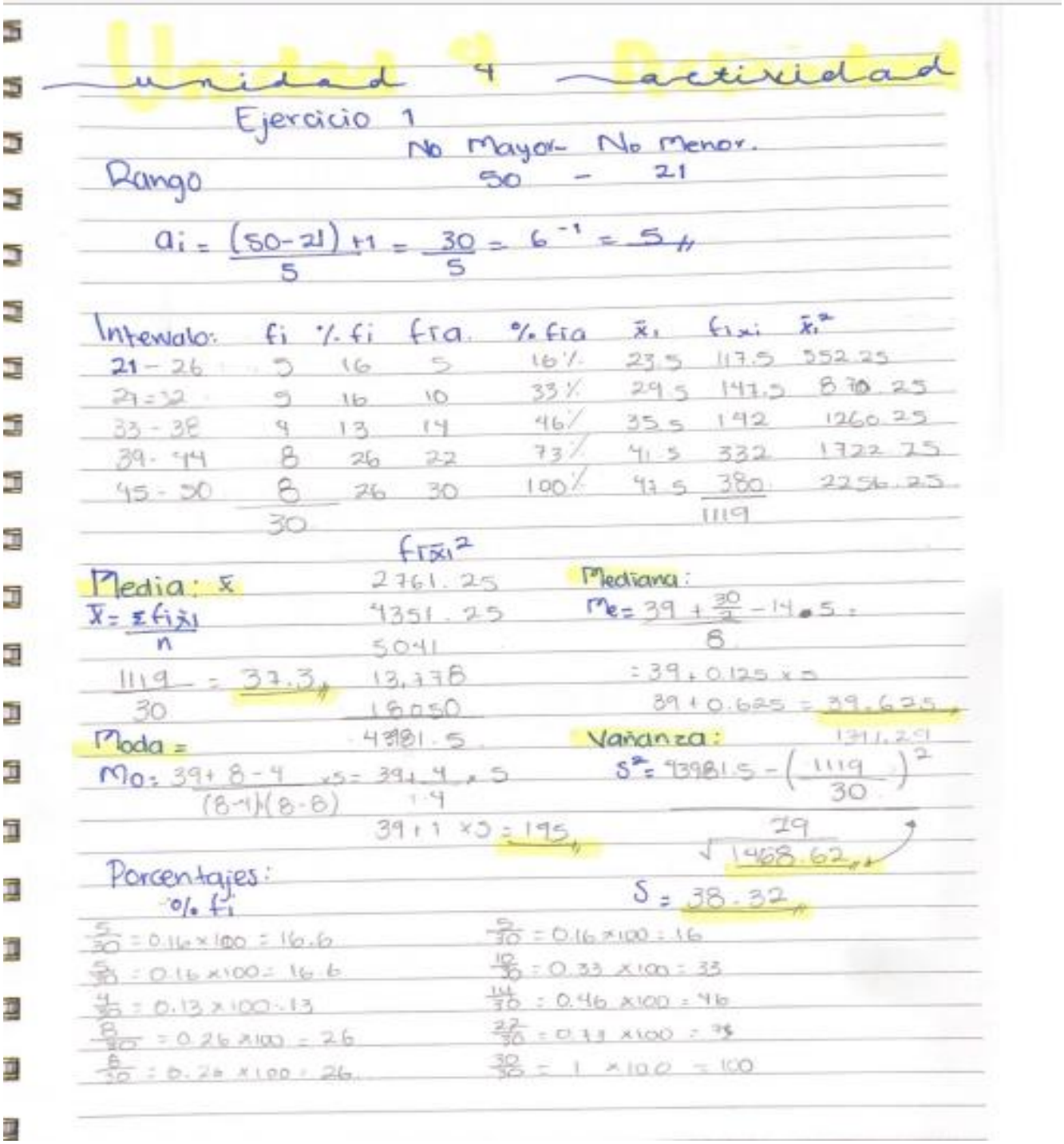
Comitán de Domínguez Chiapas a 30 de julio de

Ejercicio 1

50	30	50	21	40
30	49	25	50	47
29	46	34	48	25
44	33	49	40	33
31	39	43	43	35
28	23	44	44	21

Realice la tabla de frecuencias

En el ejercicio 1 realícelo con 5 intervalos



Unidad 4 actividad

Ejercicio 1

Rango — No Mayor 50 − No Menor 21

$a_i = \frac{(50-21)+1}{5} = \frac{30}{5} = 6^{-1} = 5$

Intervalo:	fi	% fi	fra.	% fra	$\bar{x}_i$	$f_i\bar{x}_i$	$\bar{x}_i^2$	$f_i\bar{x}_i^2$
21 − 26	5	16	5	16%	23.5	117.5	552.25	2761.25
27 − 32	5	16	10	33%	29.5	147.5	870.25	4351.25
33 − 38	4	13	14	46%	35.5	142	1260.25	5041
39 − 44	8	26	22	73%	41.5	332	1722.25	13,778
45 − 50	8	26	30	100%	47.5	380	2256.25	18050
	30					1119		43981.5

Media: $\bar{x}$

$\bar{x} = \frac{\sum f_i\bar{x}_i}{n}$

$\frac{1119}{30} = 37.3$

Mediana:

$Me = 39 + \frac{\frac{30}{2} - 14.5}{8} =$

$= 39 + 0.125 \times 5$

$39 + 0.625 = 39.625$

Moda =

$Mo = 39 + \frac{8-4}{(8-4)+(8-8)} \times 5 = 39 + \frac{4}{4} \times 5$

$39 + 1 \times 5 = 195$

Varianza:

$S^2 = 43981.5 - \left(\frac{1119}{30}\right)^2$ — 1391.29

$\frac{1468.62}{29}$

$S = 38.32$

Porcentajes:

% f_i

$\frac{5}{30} = 0.16 \times 100 = 16.6$

$\frac{5}{30} = 0.16 \times 100 = 16.6$

$\frac{4}{30} = 0.13 \times 100 = 13$

$\frac{8}{30} = 0.26 \times 100 = 26$

$\frac{8}{30} = 0.26 \times 100 = 26$

$\frac{5}{30} = 0.16 \times 100 = 16$

$\frac{10}{30} = 0.33 \times 100 = 33$

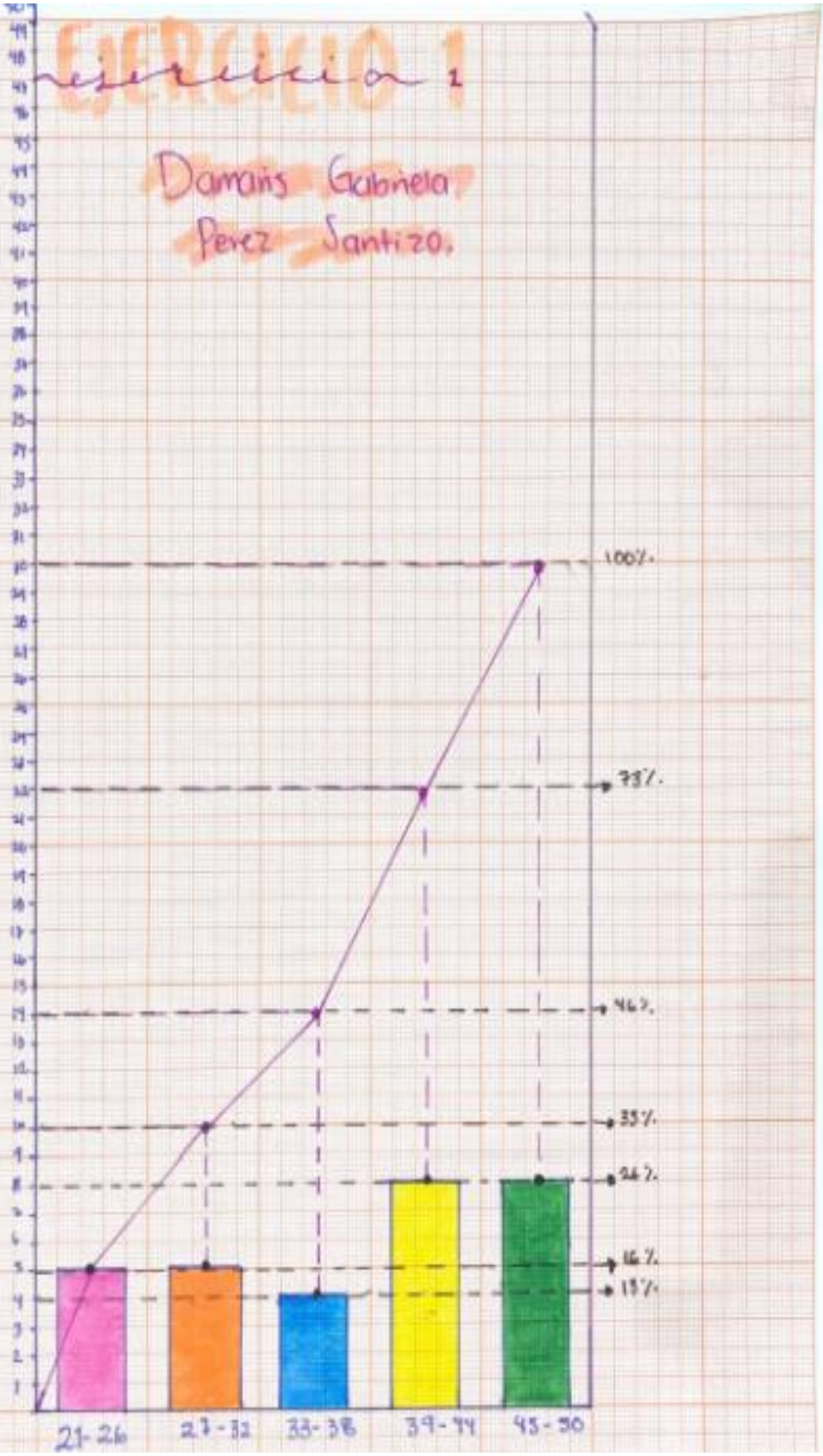
$\frac{14}{30} = 0.46 \times 100 = 46$

$\frac{22}{30} = 0.73 \times 100 = 73$

$\frac{30}{30} = 1 \times 100 = 100$

EJERCICIO 1

Damaris Gabriela Perez Santizo.



Para el ejercicio 2 realice con 8 intervalos

Ejercicio 2

33	56	80	42	68	33
70	40	75	41	53	54
78	42	66	45	64	58
55	56	73	56	41	64
39	67	79	49	44	80

Ejercicio 2:

Rango: No mayor − No menor. 80 − 33

$ai = \frac{(80-33)+1}{8} =$

Intervalo	fi	%Fi	fia	%fia	$\bar{x}i$	fixi	$\bar{x}i^2$	$fixi^2$
33-38	2	6.6%	2	6.6%	35.5	71	1260.2	2520.4
39-44	7	23.3%	9	30%	41.5	290.5	1722.2	12055.4
45-50	2	6.6%	11	36.6%	47.5	95	2256.2	4512.4
51-56	6	20%	17	56.6%	53.5	321	2862.2	17173.2
57-62	1	3.3%	18	60%	59.5	59.5	3540.2	3540.2
63-68	5	16.6%	23	76.6%	65.5	327.5	4290.2	21451
69-74	2	6.6%	25	83.3%	71.5	143	5112.2	10224.4
75-80	5	16.6%	30	100%	77.5	387.5	6006.2	30031
	30					1695	27099.6	101507.8

Media:

$\bar{X} = \frac{1695}{30} = 56.5$

Mediana:

$Me: 51 + \frac{15-11}{17} \cdot 6 = 52.41$

Moda:

$Mo = \frac{39 + 7-2}{(7-2)+(7-2)} = 39 + \frac{5}{5+5} = 39 + 0.5 = 39.5$ //

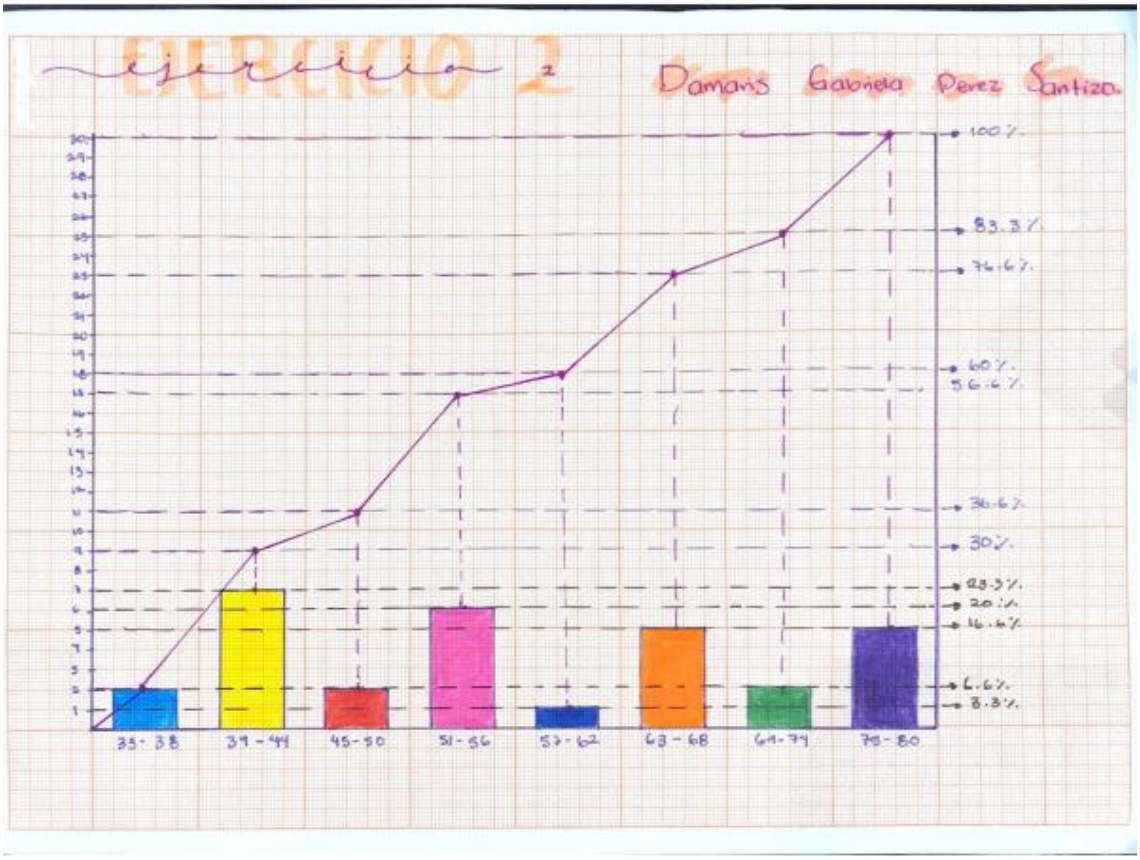
Varianza:

$S^2 = \frac{101507.8 - \left(\frac{1695}{30}\right)^2}{29} = \frac{101507.8 - 3192.25}{29}$

$S^2 = 3390.19$

$S = \sqrt{3390.19}$

$S = 58.22$ //


ejercicio 2
Damaris Gabriela Perez Santizo
100%
83.3%
76.6%
60%
56.6%
36.6%
30%
23.3%
20%
16.6%
6.6%
3.3%
35-38
39-44
45-50
51-56
57-62
63-68
69-74
75-80