



Nombre del Alumno: Karen Guadalupe Alvarez de la Cruz

Nombre del tema: Tabla de frecuencia larga.

Parcial: IV

Nombre de la Materia: Probabilidad y estadística.

Nombre de la Licenciatura: Bachillerato en enfermería

Cuatrimestre: 5° semestre

Intervalo	f_i	% f_i	f_{ia}	% f_{ia}	\bar{x}_i	$f_i \bar{x}_i$	\bar{x}_i^2	$f_i \bar{x}_i^2$
41 - 50	13	30.95	13	30.95	45.5	591.5	2070.25	26913.25
51 - 60	7	16.66	20	47.61	55.5	388.5	3080.25	21561.75
61 - 70	6	14.28	26	61.90	65.5	393	4290.25	25741.5
71 - 80	11	26.19	37	88.09	75.5	830.5	5700.25	62702.75
81 - 90	5	11.90	42	100	85.5	427.5	7310.25	36551.25
	<u>42</u>					<u>2631</u>		<u>173470.5</u>

5 intervalos

79	75	71	79	71	44
45	56	79	42	68	45
70	41	75	41	53	54
78	42	66	45	64	58
55	56	73	56	42	64
45	67	79	49	44	45
90	87	80	85	90	84

$$\bar{x} = \frac{2631}{42} = \underline{\underline{62.64}}$$

$$Me = 61 + \frac{21 - 20}{6} \cdot 9 = \underline{\underline{62.5}}$$

$$M_0 = 41 + \frac{13 - 0}{(13) + (13 - 7)} \cdot 9 = \underline{\underline{47.15}}$$

Rango

$$\frac{(90 - 41) + 1}{5} = \frac{50}{5} = 10^{29}$$

$$s^2 = \frac{173470.5 - \frac{(2631)^2}{42}}{41} = \underline{\underline{211.14}}$$

$$s = \sqrt{211.14} = 14.53$$

Karen Guadalupe
Alvarez de la Cruz.

Intervalo	f_i	% f_i	f_{ia}	% f_{ia}	\bar{x}_i	$f_i \bar{x}_i$	\bar{x}_i^2	$f_i \bar{x}_i^2$
38 - 46	8	12.5	8	12.5	42	336	1764	14112
47 - 55	8	12.5	16	25	51	408	2601	20808
56 - 64	5	7.81	21	32.81	60	300	3600	18000
65 - 73	9	14.06	30	46.87	69	621	4761	42849
74 - 82	7	10.93	37	56.81	78	546	6084	42588
83 - 91	11	17.18	48	75	87	957	7569	83259
92 - 100	16	25	64	100	96	1536	9216	147456
	64					4704		369072

Karen
Guadalupe
Alvarez de
la Cruz.

7 intervalos

45	106	65	38	49	72	45	76
100	92	63	45	67	85	50	89
90	100	98	69	77	88	66	90
56	98	88	65	88	94	63	93
100	49	80	92	92	38	78	94
73	56	84	78	100	47	84	50
38	52	91	67	49	68	92	45
91	77	100	45	56	74	100	80

$$\bar{x} = \frac{4704}{64} = \underline{\underline{73.5}}$$

$$Me = 74 + \frac{37 - 30}{7} \cdot 8 = \underline{\underline{76.28}}$$

$$Mo = 92 + \frac{16 - 11}{(16 - 11) + (16)} \cdot 8 = \underline{\underline{93.90}}$$

$$s^2 = \frac{369072 - \frac{(4704)^2}{64}}{63} = \underline{\underline{370.28}}$$

$$s = \sqrt{370.28} = 19.24$$

Rango

$$\frac{(100 - 38) + 1}{7} = \frac{63}{7} = 9^{s8}$$