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Nombre del trabajo: Media, mediana, moda y desviación estándar.

Materia: Estadística descriptiva en nutrición.

Grado: 3° Cuatrimestre

TABLA DE DATOS

EJERCICIO 1 Y 2

Sarina López González

EJERCICIO 1

40	56	45	56	50	50
55	60	55	67	49	59
60	63	54	50	55	58
63	50	50	46	48	60
47	50	65	49	40	64
40	49	62	58	44	72
55	50	78	65	50	70
50	54	84	62	45	68

EJERCICIO 2

27	40	44	35	34	57	35	38
35	87	35	44	44	55	87	45
40	35	60	78	35	78	35	56
78	44	66	76	55	54	88	67
35	35	76	89	80	86	44	77
44	40	82	35	66	94	35	78
56	85	35	70	77	90	80	35

TABLA DE DATOS

EJERCICIO 1

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MEDIA:

$$\bar{X} = \frac{\sum x_i}{N}$$

40, 40, 40, 44, 45, 45, 46, 47, 48, 49, 49, 49, 50, 50, 50, 50, 50, 50, 50, 50, 54, 54,
55, 55, 55, 55, 56, 56, 58, 58, 59, 60, 60, 60, 62, 62, 63, 63, 64, 65, 65, 67, 68, 70,
72, 78, 84.

$$\bar{X} = 40(3) + 44 + 45(2) + 46 + 47 + 48 + 49(3) + 50(9) + 54(2) + 55(4) + 56(2) + 58(2) +$$
$$59 + 60(3) + 62(2) + 63(2) + 64 + 65(2) + 67 + 68 + 70 + 72 + 78 + 84$$

48

$$\bar{X} = 120, 44, 90, 46, 47, 48, 147, 450, 108, 220, 112, 116, 59, 180, 124, 126, 64, 130,$$
$$67, 68, 70, 72, 78, 84$$

48

$$\bar{X} = \frac{2,670}{48} =$$

$$\bar{X} = 55.62$$

MEDIANA: (Me)

✓ Número de datos impar:

40, 40, 40, 44, 45, 45, 46, 47, 48, 49, 49, 49, 50, 50, 50, 50, 50, 50, 50, 50, 50, 54, 54,
55, 55, 55, 55, 56, 56, 58, 58, 59, 60, 60, 60, 62, 62, 63, 63, 64, 65, 65, 67, 68, 70, 72,
78, 84.

$$\text{Promedio } \bar{X} \rightarrow \frac{55 + 55}{2} = \frac{110}{2} = 55$$

TABLA DE DATOS

EJERCICIO 1

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MODA: (M_o)

40,40,40,44,45,45,46,47,48,49,49,49,50,50,50,50,50,50,50,50,50,54,54,55,
55,55,55,56,56,58,58,59,60,60,60,62,62,63,63,64,65,65,67,68,70,72,
78,84.

$M_o = 50$

DESVIACION ESTANDAR

40+40+40+44+45+45+46+47+48+49+49+50+50+50+50+50+50+50+50+50+50+50+50+54+54+55+55+55+55+55+55+56+58+58+59+60+60+60+62+62+

$$= \frac{2,670}{48} = 55.62 \quad 48 - 1 = 47$$

x	$x - \bar{x}$	$(x - \bar{x})^2$
40	40 - 55.62 = -15.62	$(-15.62)^2 = 243.9844$
40		
40		
44	44 - 55.62 = -11.62	$(-11.62)^2 = 135.0244$
45	45 - 55.62 = -10.62	$(-10.62)^2 = 112.7844$
46	46 - 55.62 = -9.62	$(-9.62)^2 = 92.5444$
47	47 - 55.62 = -8.62	$(-8.62)^2 = 74.3044$
48	48 - 55.62 = -7.62	$(-7.62)^2 = 58.0644$
49	49 - 55.62 = -6.62	$(-6.62)^2 = 43.8244$
50		
50		
50		
50		
50		
50		
54	54 - 55.62 = -1.62	$(-1.62)^2 = 2.6244$
55	55 - 55.62 = -0.62	$(-0.62)^2 = 0.3844$
56	56 - 55.62 = -0.38	$(-0.38)^2 = 0.1444$
58	58 - 55.62 = 2.38	$(2.38)^2 = 5.6644$
59	59 - 55.62 = 3.38	$(3.38)^2 = 11.4244$
60	60 - 55.62 = 4.38	$(4.38)^2 = 19.1844$
62	62 - 55.62 = 6.38	$(6.38)^2 = 40.7044$
63	63 - 55.62 = 7.38	$(7.38)^2 = 54.4644$
64	64 - 55.62 = 8.38	$(8.38)^2 = 70.2244$
65	65 - 55.62 = 9.38	$(9.38)^2 = 87.9844$
67	67 - 55.62 = 11.38	$(11.38)^2 = 129.5044$
68	68 - 55.62 = 12.38	$(12.38)^2 = 153.2644$
70	70 - 55.62 = 14.38	$(14.38)^2 = 206.7844$
72	72 - 55.62 = 16.38	$(16.38)^2 = 268.3044$
78	78 - 55.62 = 22.38	$(22.38)^2 = 500.8644$
84	84 - 55.62 = 28.38	$(28.38)^2 = 805.4244$

$$2064.14 = \sqrt{\frac{2629.41}{47}} = \sqrt{55.94} = 7.48$$

