



**Nombre de alumno:**

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**Nombre del trabajo:**

Ejercicios

**Materia:**

Estadística descriptiva

**Grado:** 3°

**Grupo:** "A"

# Actividad 1

Karine Alejandra Vicente Villatoro

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

$(21, 21)$   
 $(21, 21)$   
 $(21, 21)$   
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 $(21, 21)$   
 $(21, 21)$

Rango = No. Mayor - No. Menor + (1) / No. Intervalos.  
 Rango =  $50 - 21 + 1 / 6 = 30 / 6 = 5$

21 - 25								
26 - 30								
31 - 35								
36 - 40								
41 - 45								
46 - 50								

Rango/intervalo	f <sub>ia</sub>	f <sub>ia</sub> %
$8 \div 30 (100) = 26.6\%$	$0 + 8 = 8$	$8 \div 30 (100) = 26.6\%$
$4 \div 30 (100) = 13.3\%$	$8 + 4 = 12$	$12 \div 30 (100) = 40\%$
$5 \div 30 (100) = 16.6\%$	$12 + 5 = 17$	$17 \div 30 (100) = 56.6\%$
$3 \div 30 (100) = 10\%$	$17 + 3 = 20$	$20 \div 30 (100) = 66.6\%$
$3 \div 30 (100) = 10\%$	$20 + 3 = 23$	$23 \div 30 (100) = 76.6\%$
$7 \div 30 (100) = 23.3\%$	$23 + 7 = 30$	$30 \div 30 (100) = 100\%$

$\bar{x}$	f <sub>i</sub> x <sub>i</sub>	$(\bar{x})^2$	f <sub>i</sub> x <sub>i</sub> <sup>2</sup>
$(21 - 25) / 2 = 23$	$8(23) = 184$	$(23)^2 = 529$	$(184)^2 = 33856$
$(26 - 30) / 2 = 28$	$4(28) = 112$	$(28)^2 = 784$	$(112)^2 = 12544$
$(31 - 35) / 2 = 33$	$5(33) = 165$	$(33)^2 = 1089$	$(165)^2 = 27225$
$(36 - 40) / 2 = 38$	$3(38) = 114$	$(38)^2 = 1444$	$(114)^2 = 12996$
$(41 - 45) / 2 = 43$	$3(43) = 129$	$(43)^2 = 1849$	$(129)^2 = 16641$
$(46 - 50) / 2 = 48$	$7(48) = 336$	$(48)^2 = 2304$	$(336)^2 = 112896$

# Actividad 2

Karine Abigail Vicente Villaloro

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

Operación para el rango

$$\frac{(80 - 39) + 1}{7} = \frac{42}{7} = 6$$

Rango	Intervalo	f <sub>ia</sub>
39 - 44	8 / 30 (100) = 26.6 %	0 + 8 = 8
45 - 50	3 / 30 (100) = 10 %	8 + 3 = 11
51 - 56	6 / 30 (100) = 20 %	11 + 6 = 17
57 - 62	1 / 30 (100) = 3.3 %	17 + 1 = 18
63 - 68	5 / 30 (100) = 16.6 %	18 + 5 = 23
69 - 74	2 / 30 (100) = 6.6 %	23 + 2 = 25
75 - 80	5 / 30 (100) = 16.6 %	25 + 5 = 30

f <sub>ia</sub> %	$\bar{x}$	f <sub>i</sub> × $\bar{x}$
8 / 30 (100) = 26.6 %	(39 - 44) / 2 = 41.5	8(41.5) = 332
11 / 30 (100) = 36.6 %	(45 - 50) / 2 = 47.5	3(47.5) = 142.5
17 / 30 (100) = 56.6 %	(51 - 56) / 2 = 53.5	6(53.5) = 321
18 / 30 (100) = 11 %	(57 - 62) / 2 = 59.5	1(59.5) = 59.5
23 / 30 (100) = 76.6 %	(63 - 68) / 2 = 65.5	5(65.5) = 327.5
25 / 30 (100) = 83.3 %	(69 - 74) / 2 = 71.5	2(71.5) = 143
30 / 30 (100) = 76.6 %	(75 - 80) / 2 = 77.5	5(77.5) = 327.5

$(\bar{x})^2$	f <sub>i</sub> × $\bar{x}^2$
(41.5) <sup>2</sup> = 1722.2	(332) <sup>2</sup> = 110224
(47.5) <sup>2</sup> = 2256.2	(142.5) <sup>2</sup> = 20306.2
(53.5) <sup>2</sup> = 2862.2	(321) <sup>2</sup> = 103041
(59.5) <sup>2</sup> = 3540.2	(59.5) <sup>2</sup> = 3540.2
(65.5) <sup>2</sup> = 4290.2	(327.5) <sup>2</sup> = 107256.2
(71.5) <sup>2</sup> = 5112.2	(143) <sup>2</sup> = 20449
(77.5) <sup>2</sup> = 6006.2	(327.5) <sup>2</sup> = 107256.2