

Daniel Jose Luis Suarez Rojas Ejercicio 1

Datos

	X_i	$X_i - \bar{X}$	$(X_i - \bar{X})^2$
1	23	-1.82	3.31
2	25	0.18	0.03
3	29	4.18	17.47
4	23	-1.82	3.31
5	23	-1.82	3.31
6	23	-1.82	3.31
7	25	0.18	0.03
8	28	3.18	10.11
9	24	-0.82	0.67
10	25	0.18	0.03
11	24	-0.82	0.67
12	24	-0.82	0.67
13	23	-1.82	3.31
14	24	-0.82	0.67
15	25	0.18	0.03
16	25	0.18	0.03
17	24	-0.82	0.67
18	25	0.18	0.03
19	26	1.18	1.39
20	24	-0.82	0.67
21	24	-0.82	0.67
22	25	0.18	0.03
23	26	1.18	1.39
24	26	1.18	1.39
25	26	1.18	1.39
26	27	2.18	4.75
27	23	-1.82	3.31
28	27	2.18	4.75
29	24	-0.82	0.67
$\Sigma = 0.86$		$\Sigma = 68.07$	

$$N = 29$$

$$\bar{X} = 24.82$$

$$n = 6$$

$$\sigma^2 = \frac{\sum_{i=1}^n (X_i - \bar{X})^2}{n} = \sigma^2 = \frac{68.07}{29} \quad \sigma^2 = 2.34 \mu$$

$$\sigma = \sqrt{\sigma^2} = \sqrt{2.34} = 1.53 \mu$$

$$CV = \frac{\sigma}{\bar{X}} = \frac{1.53}{24.82} = 0.0617 \mu$$

518.87
530.029
540.829

Ejercicio ①

i	X_i	$(X_i - \bar{X})^2$	$N \cdot X_i$	$(X_i - \bar{X})^2$
1	44.347	126.270	41	16.505
2	17.445	427.042	43	17.326
3	26.880	38.812	44	37.831
4	23.366	94.945	45	29.757
5	42.464	87.497	46	37.765
6	15.480	310.816	47	22.237
7	21.562	133.356	48	38.601
8	11.625	461.605		
9	39.496	40.780		
10	39.402	39.589		
11	47.649	212.838		
12	44.315	125.552		
13	29.581	12.453		
14	44.320	125.664		
15	35.264	4.639		
16	10.124	528.356		
17	43.520	108.268		
18	26.360	45.562		
19	19.534	184.307		
20	30.755	5.546		
21	37.327	17.785		
22	15.832	298.529		
23	83.919	2581.554		
24	29.498	13.046		
25	46.136	169.676		
26	18.007	228.100		
27	36.339	10.426		
28	27.696	29.311		
29	47.413	212.751		
30	47.636	211.004		
31	20.438	147.185		
32	49.079	255.008		
33	40.668	557.123		
34	45.932	164.403		
35	40.454	53.434		
36	46.132	164.572		
37	35.054	3.771		
38	11.906	449.609		
39	22.532	111.894		
40	43.045	98.704		
41	45.074	143.137		

$\Sigma =$

$$\bar{X} = \frac{\Sigma X_i}{N} = \frac{1589.728}{48}$$

$$\bar{X} = 33.11$$

$$\sigma^2 = \frac{\Sigma (X_i - \bar{X})^2}{N}$$

$$\sigma^2 = \frac{9053.161}{48} = 188.607$$

$$\sigma = \sqrt{\sigma^2} = \sqrt{188.607} = 13.733$$

$$CV = \frac{\sigma}{\bar{X}} = \frac{13.733}{33.11} = 0.414$$