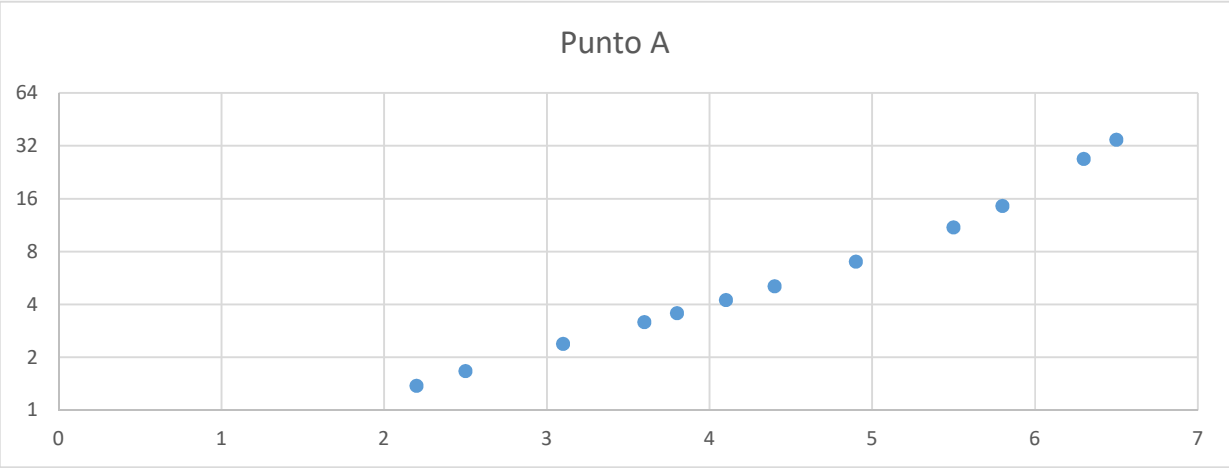
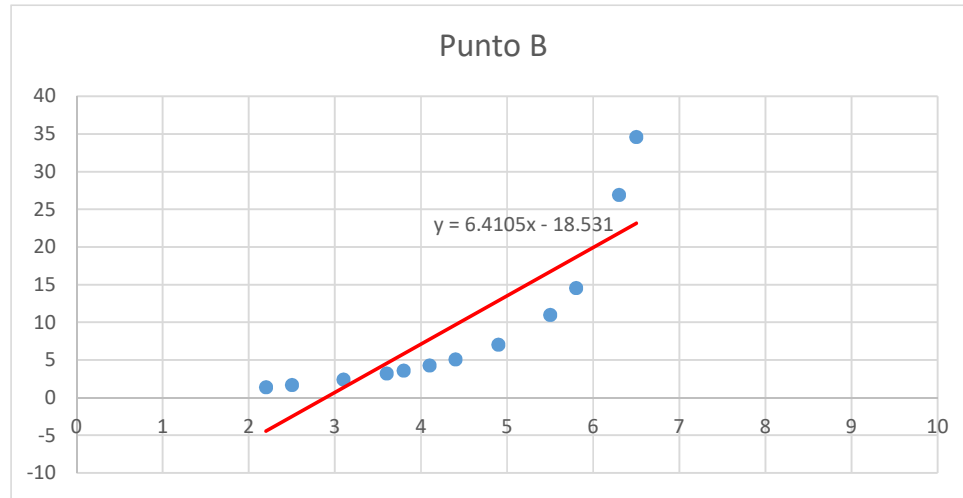


X	2.2	2.5	3.1	3.6	3.8	4.1	4.4	4.9	5.5	5.8	6.3	6.5
Y	1.4	1.668	2.385	3.176	3.562	4.241	5.079	7.012	10.983	14.523	26.891	34.567



X	2.2	2.5	3.1	3.6	3.8	4.1	4.4	4.9	5.5	5.8	6.3	6.5
Y	1.375	1.668	2.385	3.176	3.562	4.241	5.079	7.012	10.983	14.523	26.891	34.567

X	Y	X^2	X.Y
2.2	1.375	4.84	3.025
2.5	1.668	6.25	4.17
3.1	2.385	9.61	7.394
3.6	3.176	12.96	11.43
3.8	3.562	14.44	13.54
4.1	4.241	16.81	17.39
4.4	5.079	19.36	22.35
4.9	7.012	24.01	34.36
5.5	10.98	30.25	60.41
5.8	14.52	33.64	84.23
6.3	26.89	39.69	169.4
6.5	34.57	42.25	224.7
52.7	115.5	254.1	652.4



Sistema de ecuaciones

$$254,11a + 52,7b = 652,3909$$

$$52,7a + 12b = 115,462$$

$$a = 2,567356263035693 - 0,2073905001770887b$$

$$a = 2,567356263035693 - 0,2073905001770887 * (-18,53086648531412)$$

$$a = 2,567356263035693 + 3,843125669104144$$

$$a = \mathbf{6,410481932139837}$$

$$52,7 * (2,567356263035693 - 0,2073905001770887b) + 12b = 115,462$$

$$135,299675061981 - 10,92947935933257b + 12b = 115,462$$

$$135,299675061981 + 1,070520640667426b = 115,462$$

$$1,070520640667426b = -19,837675061981$$

$$b = \mathbf{-18,53086648531412}$$

$$\mathbf{P(X) = 6,410481932139837x - 18,53086648531412}$$

X	2.2	2.5	3.1	3.6	3.8	4.1	4.4	4.9	5.5	5.8	6.3	6.5
Y	1.375	1.67	2.385	3.176	3.562	4.241	5.079	7.012	10.98	14.523	26.891	34.567

X	Y	X^4	X^3	X^2	X.Y	(X^2).Y
2.2	1.375	23.4	10.648	4.84	3.025	6.655
2.5	1.668	39.1	15.625	6.25	4.17	10.425
3.1	2.385	92.4	29.791	9.61	7.3935	22.91985
3.6	3.176	168	46.656	12.96	11.4336	41.16096
3.8	3.562	209	54.872	14.44	13.5356	51.43528
4.1	4.241	283	68.921	16.81	17.3881	71.29121
4.4	5.079	375	85.184	19.36	22.3476	98.32944
4.9	7.012	576	117.649	24.01	34.3588	168.3581
5.5	10.983	915	166.375	30.25	60.4065	332.2358
5.8	14.523	1132	195.112	33.64	84.2334	488.5537
6.3	26.891	1575	250.047	39.69	169.4133	1067.304
6.5	34.567	1785	274.625	42.25	224.6855	1460.456
52.7	115.462	7172	1315.505	254.11	652.3909	3819.124

Sistema de ecuaciones

$$7172,252a + 1315,505b + 254,11c = 3819,124$$

$$1315,505a + 254,11b + 52,7c = 652,3909$$

$$254,11a + 52,7b + 12c = 115,462$$

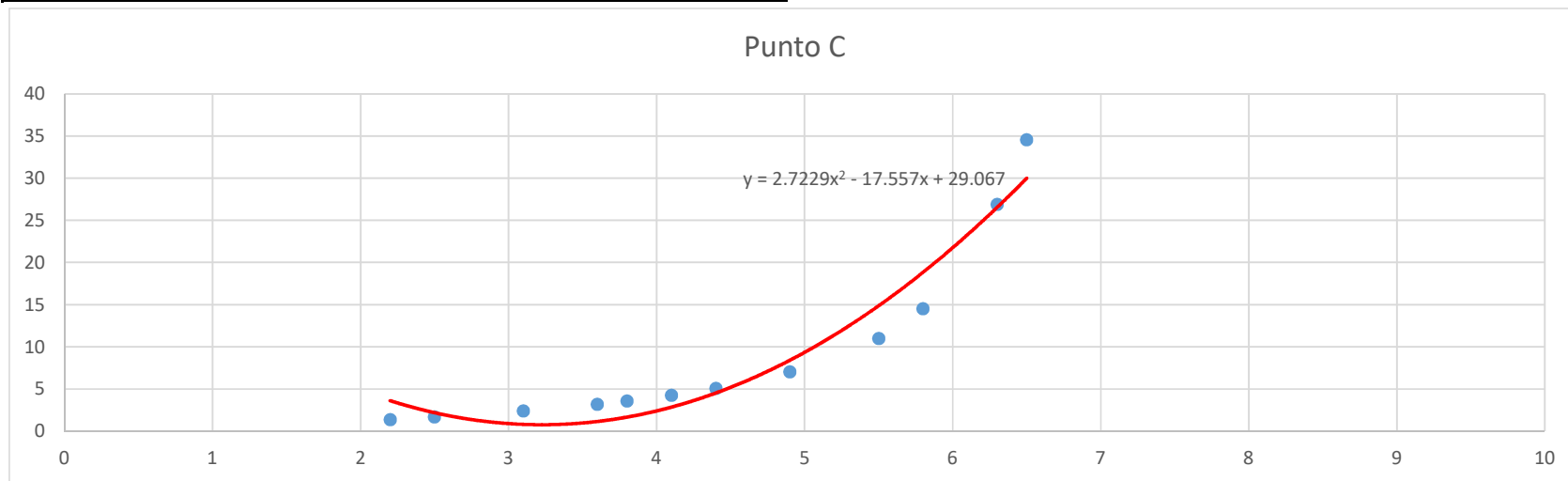
Resolución por Método de Gauss

$$a = 2,72292947189351$$

$$b = -17,55729321052292$$

$$c = 29,06731200764149$$

$$P(X) = 2,72292947189351(x^2) - 17,55729321052292x + 29,06731200764149$$



X	2.2	2.5	3.1	3.6	3.8	4.1	4.4	4.9	5.5	5.8	6.3	6.5
Y	1.375	1.668	2.385	3.176	3.562	4.241	5.079	7.012	10.983	14.523	26.891	34.567

X	X = 1/X	Y	Y = 1/Y	X^2	X.Y
2.2	0.454545455	1.375	0.727272727	0.20661157	0.330578512
2.5	0.4	1.668	0.599520384	0.16	0.239808153
3.1	0.322580645	2.385	0.419287212	0.104058273	0.135253939
3.6	0.277777778	3.176	0.314861461	0.077160494	0.087461517
3.8	0.263157895	3.562	0.280741157	0.069252078	0.073879252
4.1	0.243902439	4.241	0.235793445	0.0594884	0.057510596
4.4	0.227272727	5.079	0.196889151	0.051652893	0.044747534
4.9	0.204081633	7.012	0.142612664	0.041649313	0.029104625
5.5	0.181818182	10.983	0.091049804	0.033057851	0.01655451
5.8	0.172413793	14.523	0.068856297	0.029726516	0.011871775
6.3	0.158730159	26.891	0.037187163	0.025195263	0.005902724
6.5	0.153846154	34.567	0.028929326	0.023668639	0.004450665
52.7	3.060126859	115.462	3.14300079	0.881521289	1.037123805

Sistema de ecuaciones

0,881521A + 3,060127B = 1,037124

3,060127A + 12B = 3,143001

$y = ax/(b+x)$
 $1/y = (b+x)/ax$
 $1/y = (b/a)(1/x) + (1/a)$
 $Y = AX + B$

A = b/a

B = 1/a

a = -3,011275919

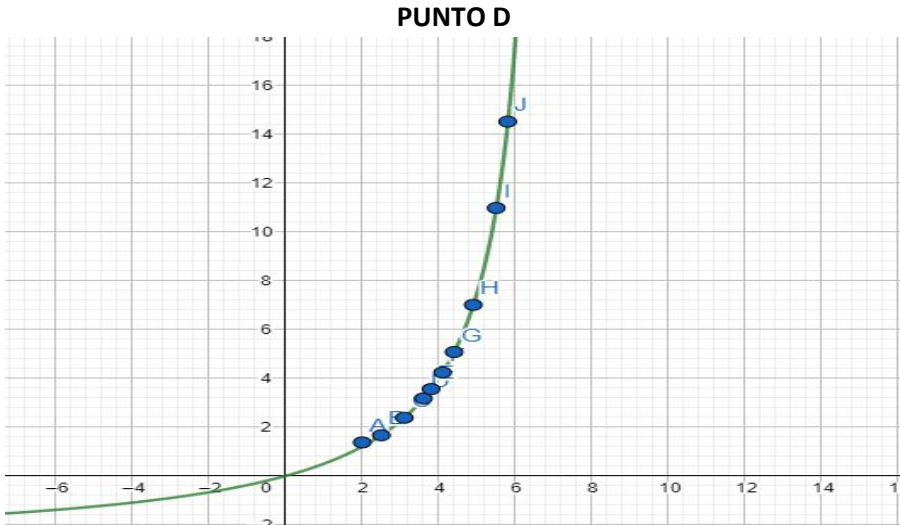
b = -7,014232815

Resolución por Gauss

A = 2,329322521

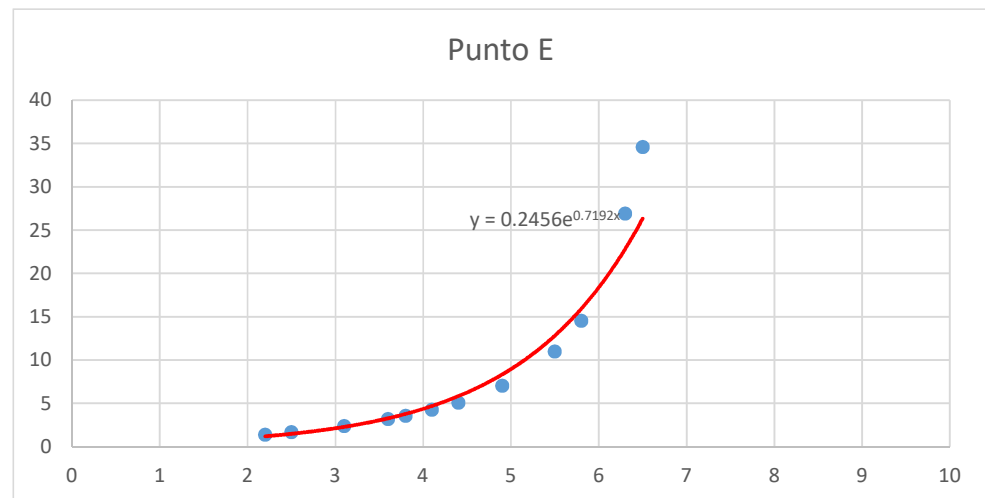
B = -0,3320851449

P(X) = -3,011275919x/(-7,014232815+x)



X	2.2	2.5	3.1	3.6	3.8	4.1	4.4	4.9	5.5	5.8	6.3	6.5
Y	1.375	1.668	2.385	3.176	3.562	4.241	5.079	7.012	10.983	14.523	26.891	34.567

X	Y	Y = LN(Y)	X^2	X.Y
2.2	1.375	0.318453731	4.84	0.700598208
2.5	1.668	0.511625304	6.25	1.27906326
3.1	2.385	0.869199124	9.61	2.694517285
3.6	3.176	1.155622543	12.96	4.160241156
3.8	3.562	1.270322185	14.44	4.827224302
4.1	4.241	1.44479909	16.81	5.923676271
4.4	5.079	1.625114392	19.36	7.150503324
4.9	7.012	1.947622967	24.01	9.543352539
5.5	10.983	2.396348623	30.25	13.17991743
5.8	14.523	2.6757336	33.64	15.51925488
6.3	26.891	3.291791658	39.69	20.73828745
6.5	34.567	3.54289947	42.25	23.02884655
52.7	115.462	21.04953269	254.11	108.7454826



$$y = a(e^{bx})$$

$$\ln y = \ln a + bx$$

$$Y = Ax + B$$

Sistema de ecuaciones $A = b$ $B = \ln a$

$$254,11A + 52,7B = 108 \quad \mathbf{b = 0,7191698305}$$

$$52,7A + 12B = 21,0495 \quad \mathbf{a = 0,2455568791}$$

Resolución por Gauss

$$A = 0,7191698305$$

$$B = -1,404226672$$

$$\mathbf{P(X) = 0,2455568791 * e^{(0,7191698305x)}}$$

Luego de comparar consideramos la aproximación más óptima elevando los puntos al cuadrado y sumarlos, obteniendo así el error de cada aproximación realizada para luego elegir la de menor error.

En este caso podemos apreciar que la aproximación de menor error será la seleccionada en el punto D, de la forma $Y = AX/(B+X)$

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