



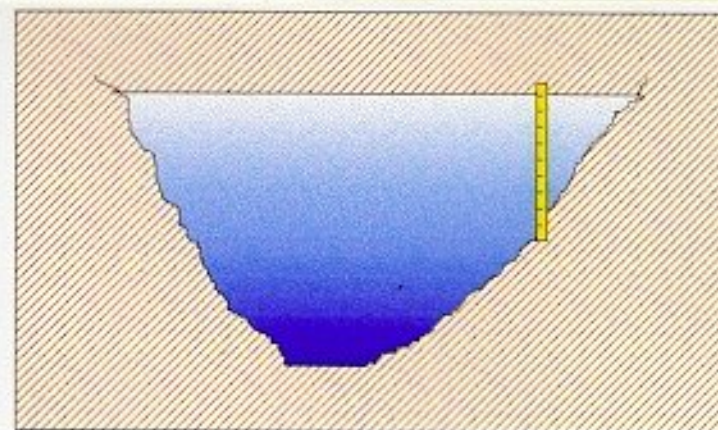
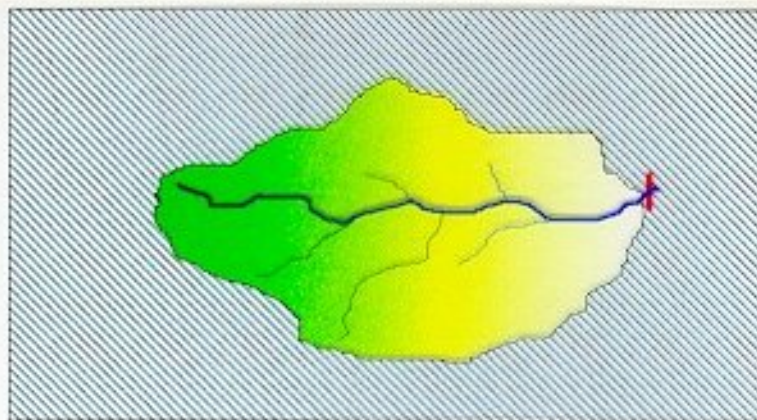
*Escola Politécnica da USP
Dpto de Engenharia Hidráulica e Sanitária*

PHD 307-

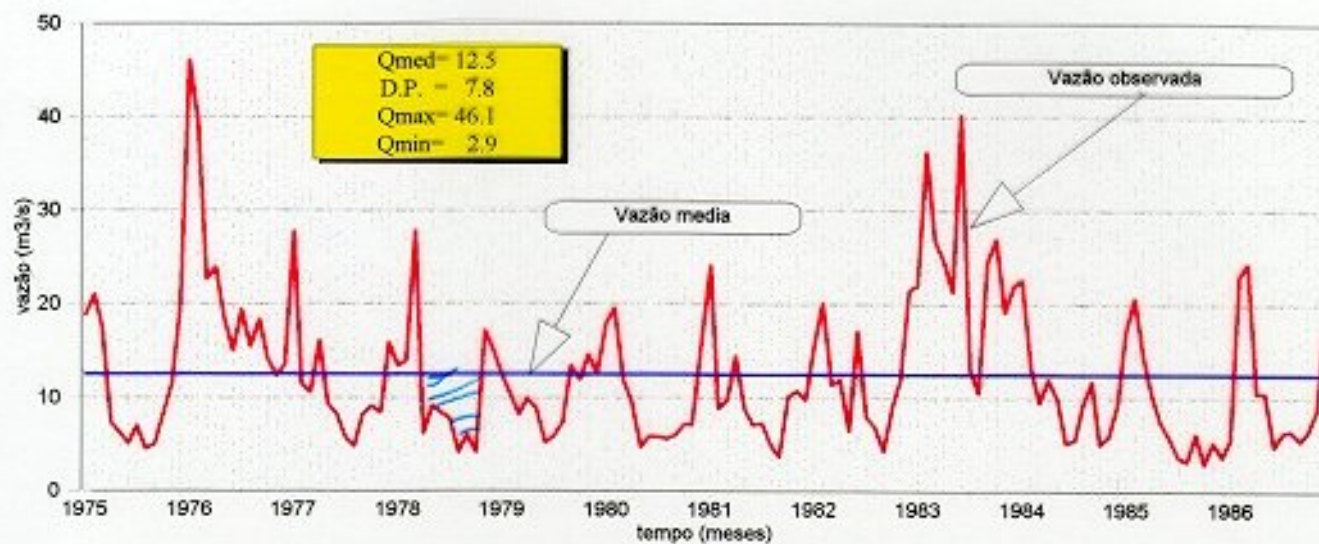
Hidrologia Aplicada

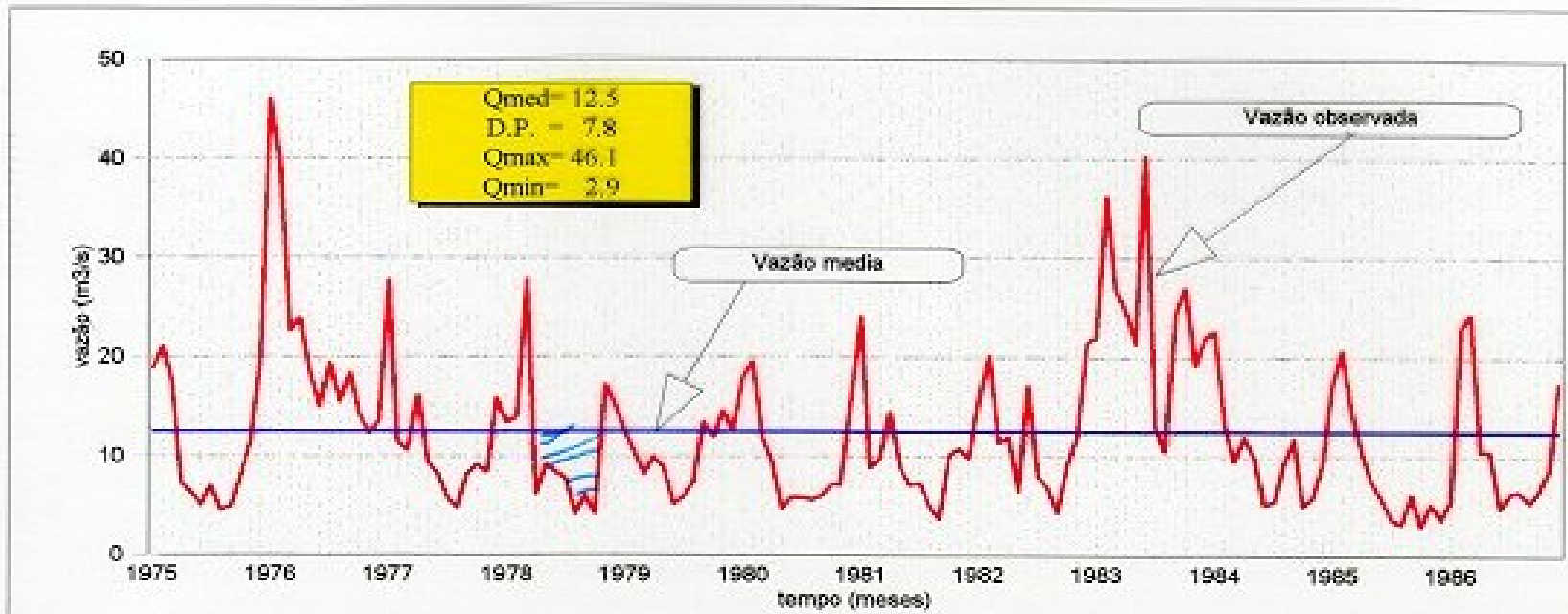
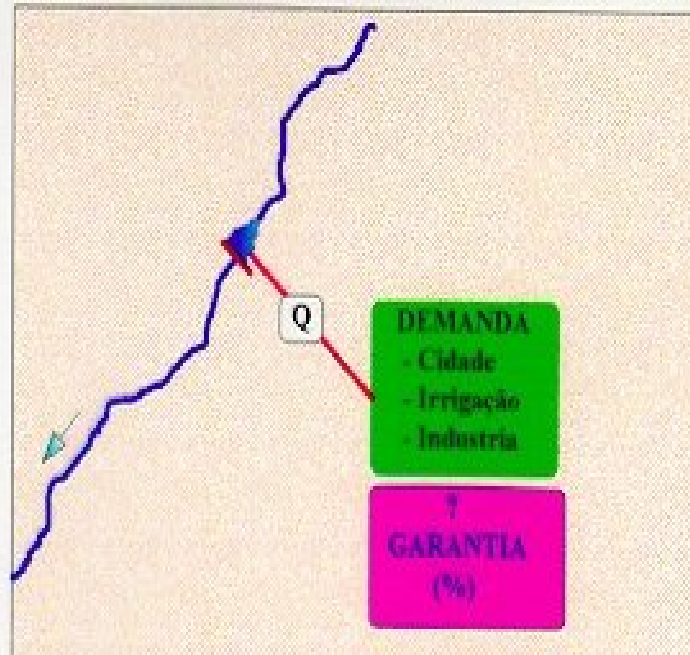
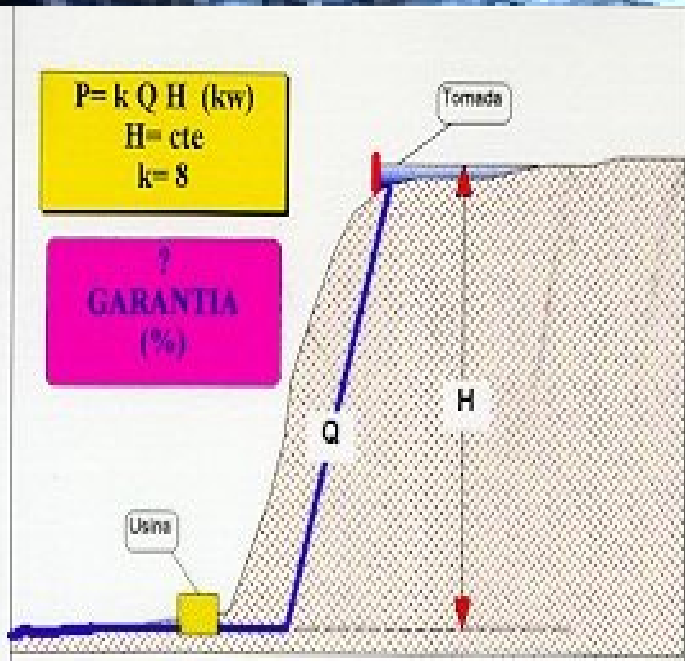
Curva de Permanência

Profs Rubem La Laina Porto e Kamel Zahed Filho

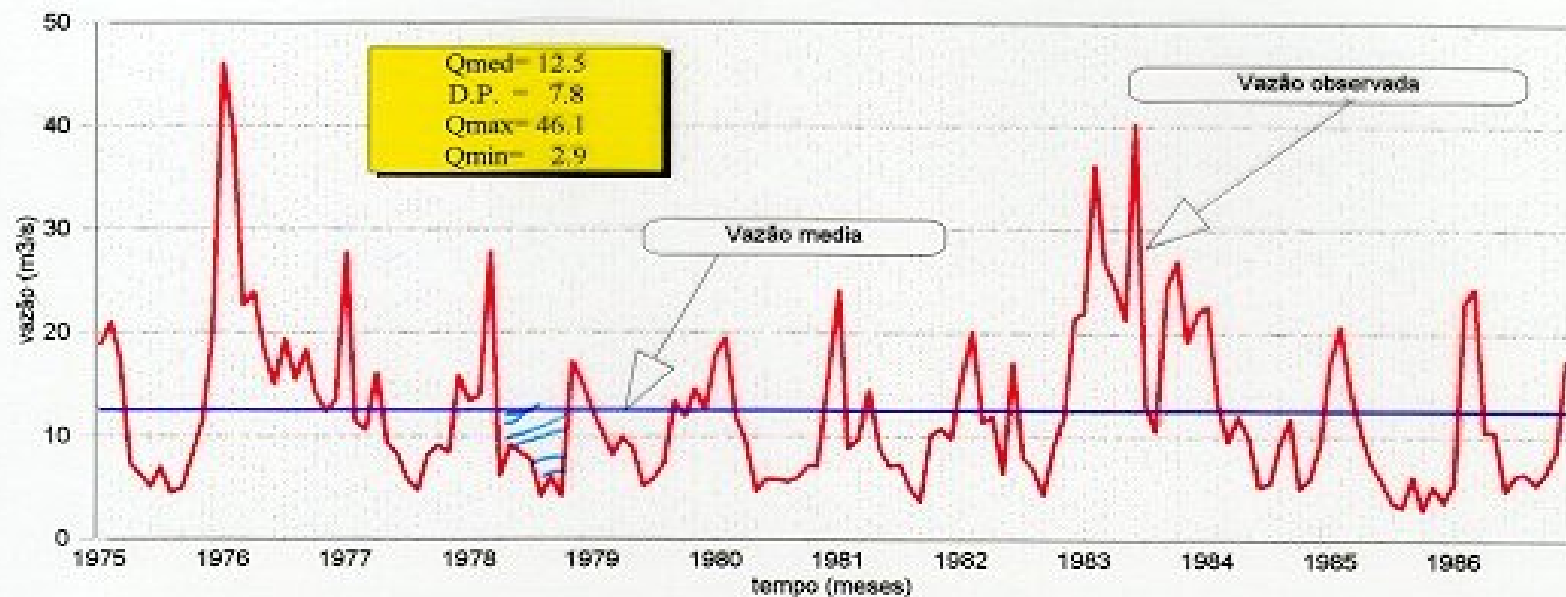


ANO	Jan	Fev	Mar	Abr	Mai	Jun	Jul	Ago	Set	Out	Nov	Dez
1975	18.80	21.00	17.50	7.32	6.27	5.06	6.96	4.49	5.00	8.13	11.50	19.70
1976	46.10	39.70	22.60	23.90	18.50	15.00	19.40	15.50	18.40	14.20	12.30	13.60
1977	27.70	11.50	10.60	16.10	9.40	8.20	5.80	4.80	8.20	9.10	8.40	15.90
1978	13.40	14.00	27.80	6.20	9.20	8.40	7.80	4.20	6.10	4.20	17.20	15.40
1979	12.40	10.5										
1980	18.00	19.6										
1981	24.10	8.9										
1982	15.30	20.1										
1983	22.00	36.3										
1984	22.60	13.2										
1985	17.20	20.7										
1986	5.57	23.0										
Med:	20.26	19.8										
Max:	46.10	39.7										
Min:	5.57	8.9										

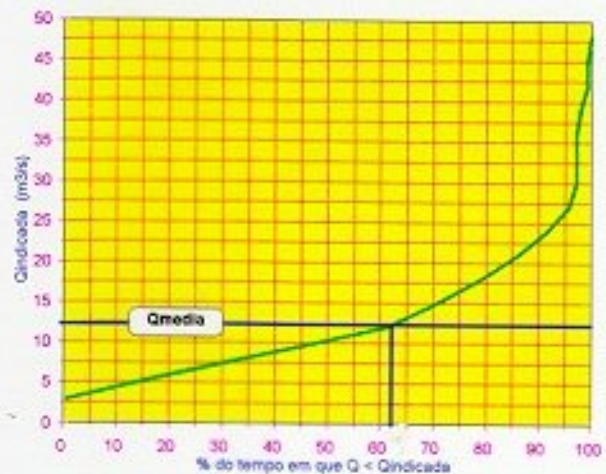
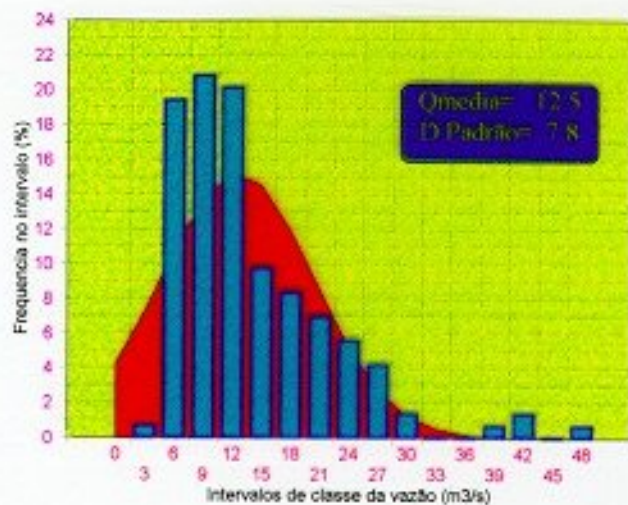


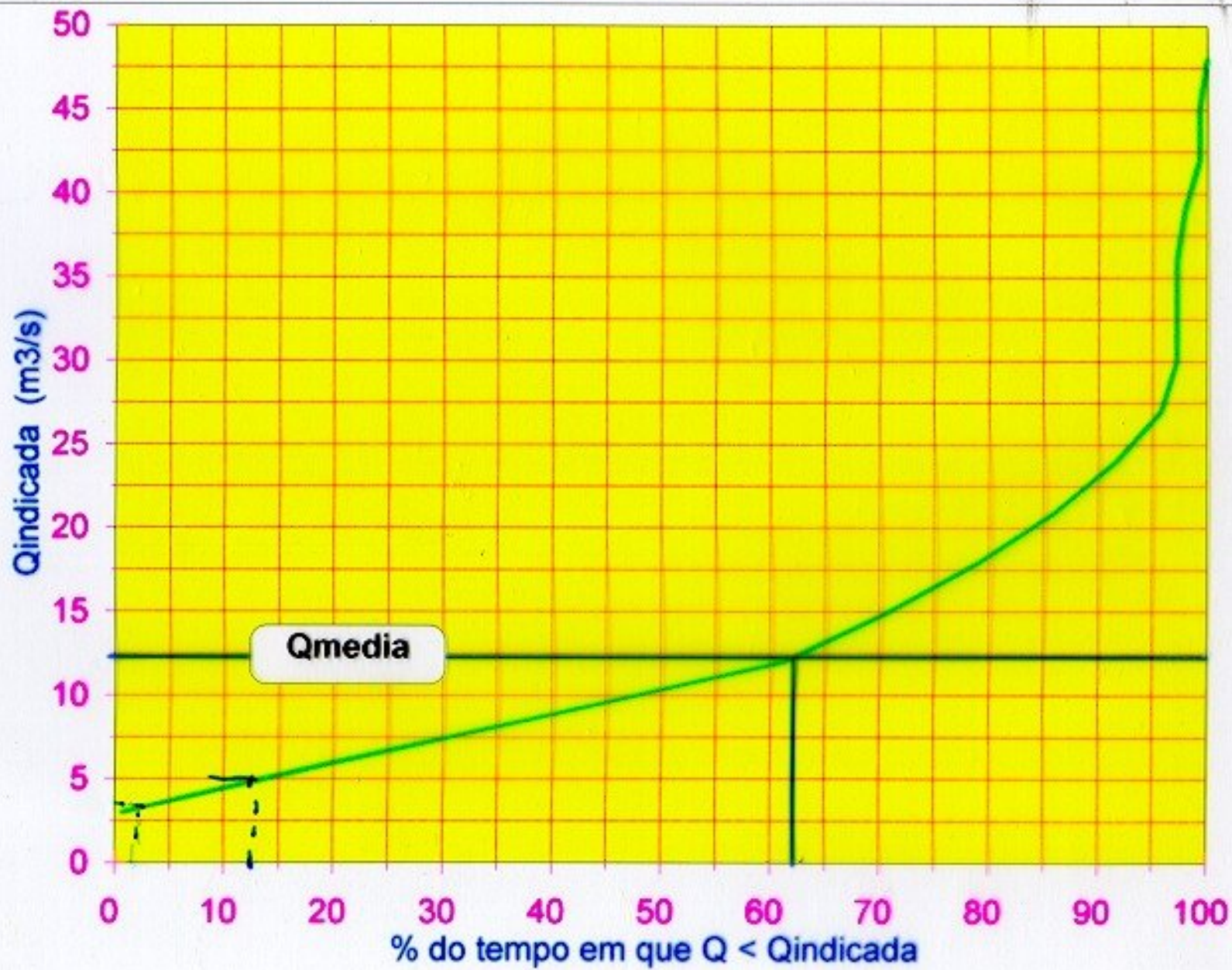


Intervalos de Classe (m ³ /s)	N. de ocorrências no intervalo	N. de ocorrência acumulado	f (%) no intervalo	F (%) acumulada
de 0.00 a 3.00	1	1	0.69	0.69
de 3.00 a 6.00	28	29	19.44	20.14
de 6.00 a 9.00	30	59	20.83	40.97
de 9.00 a 12.00	29	88	20.14	61.11
de 12.00 a 15.00	14	102	9.72	70.83
de 15.00 a 18.00	12	114	8.33	79.17
de 18.00 a 21.00	10	124	6.94	86.11
de 21.00 a 24.00	8	132	5.56	91.67
de 24.00 a 27.00	6	138	4.17	95.83
de 27.00 a 30.00	2	140	1.39	97.22
de 30.00 a 33.00	0	140	0.00	97.22
de 33.00 a 36.00	0	140	0.00	97.22
de 36.00 a 39.00	1	141	0.69	97.92
de 39.00 a 42.00	2	143	1.39	99.31
de 42.00 a 45.00	0	143	0.00	99.31
de 45.00 a 48.00	1	144	0.69	100.00



Intervalos de Classe (m ³ /s)	N. de ocorrências no intervalo	N. de ocorrência acumulado	f (%) no intervalo	F (%) acumulada
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de 33.00 a 36.00	0	140	0.00	97.22
de 36.00 a 39.00	1	141	0.69	97.92
de 39.00 a 42.00	2	143	1.39	99.31
de 42.00 a 45.00	0	143	0.00	99.31
de 45.00 a 48.00	1	144	0.69	100.00





Intervalos de Classe (m3/s)	N. de ocorrências no intervalo	N. de ocorrência acumulado	f (%) no intervalo	F (%) acumulada
de 0.00 a 3.00	1	1	0.69	0.69
de 3.00 a 6.00	28	29	19.44	20.14
de 6.00 a 9.00	30	59	20.83	40.97
de 9.00 a 12.00	29	88	20.14	61.11
de 12.00 a 15.00	14	102	9.72	70.83
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de 39.00 a 42.00	2	143	1.39	99.31
de 42.00 a 45.00	0	143	0.00	99.31
de 45.00 a 48.00	1	144	0.69	100.00

Orientação

0.5

Número de intervalos de Classe= N

no caso:

Número de Intervalos de Classe= 12

Amplitude do Intervalo = 3.6 (3 ≤ Amplitude ≤ 4)