3.3. Для таблично заданной функции путем решения нормальной системы МНК найти приближающие многочлены а) 1-ой и б) 2-ой степени. Для каждого из приближающих многочленов вычислить сумму квадратов ошибок. Построить графики приближаемой функции и приближающих многочленов.

1.							
	i	0	1	2	3	4	5
	$X_{i}$	-1.0	0.0	1.0	2.0	3.0	4.0
	$y_i$	-0.5	0.0	0.5	0.86603	1.0	0.86603
2.							
	i	0	1	2	3	4	5
	$X_i$	-1.0	0.0	1.0	2.0	3.0	4.0
	$y_i$	0.86603	1.0	0.86603	0.50	0.0	-0.50
3.							
	i	0 -0.9	1	2	3	4 2.7	5 3.6
	$X_i$						
	$y_i$	-0.36892	0.0	0.36892	0.85408	1.7856	6.3138
4.	i	0	1	2	3	4	5
		1.0	1.9	2.8	3.7	4.6	5.5
	$X_i$	2.4142	1.0818	0.50953	0.11836	-0.24008	-0.66818
E .	$y_i$		1.0010	0.00300	0.11000	0.21000	0.00010
5.	i	0	1	2	3	4	5
	$x_i$	0.1	0.5	0.9	1.3	1.7	2.1
	$y_i$	-2.3026	-0.69315	-0.10536	0.26236	0.53063	0.74194
6.							
	i	0	1	2	3	4	5
	$X_{i}$	-3.0	-2.0	-1.0	0.0	1.0	2.0
	$y_i$	0.04979	0.13534	0.36788	1.0	2.7183	7.3891
7.						-	
	i	0.0	1 0.2	2	3	0.8	5 1.0
	$x_i$						
	$y_i$	1.0	1.0032	1.0512	1.2592	1.8192	3.0
8.	i	0	1	2	3	4	5
		-0.7	-0.4	-0.1	0.2	0.5	0.8
	$\frac{x_i}{y}$	-0.7754	-0.41152	-0.10017	0.20136	0.5236	0.9273
9.	$y_i$						
<i>J</i> .	i	0	1	2	3	4	5
	$X_i$	-0.7	-0.4	-0.1	0.2	0.5	0.8
	$y_i$	2.3462	1.9823	1.671	1.3694	1.0472	0.6435
10.	· 1						
	i	0	1	2	3	4	5
	$X_i$	-5.0	-3.0	-1.0	1.0	3.0	5.0
	$y_i$	-1.3734	-1.249	-0.7854	0.7854	1.249	1.3734
		•					

11.							
	i	0	1	2	3	4	5
	$X_{i}$	-5.0	-3.0	-1.0	1.0	3.0	5.0
	$y_i$	2.9442	2.8198	2.3562	0.7854	0.32175	0.1974
12.							
	i	0	1	2	3	4	5
	$X_{i}$	-1.0	0.0	1.0	2.0	3.0	4.0
	$y_i$	-1.8415	0.0	1.8415	2.9093	3.1411	3.2432
13.							
	i	0	1	2	3	4	5
	$X_{i}$	-1.0	0.0	1.0	2.0	3.0	4.0
	$y_i$	-0.4597	1.0	1.5403	1.5839	2.010	3.3464
14.							
	i	0	1	2	3	4	5
	$X_{i}$	-0.9	0.0	0.9	1.8	2.7	3.6
	$y_i$	-1.2689	0.0	1.2689	2.6541	4.4856	9.9138
15.						1	
	i	0	1	2	3	4	5
	$x_i$	1.0	1.9	2.8	3.7	4.6	5.5
	$y_{i}$	3.4142	2.9818	3.3095	3.8184	4.3599	4.8318
16.							
	i	0	1	2	3	4	5
	$X_i$	0.1	0.5	0.9	1.3	1.7	2.1
	$y_i$	-2.2026	-0.19315	0.79464	1.5624	2.2306	2.8419
17.						T	
	i	0 -3.0	1 -2.0	2 -1.0	3	1.0	5 2.0
	$X_i$						
	$y_i$	-2.9502	-1.8647	-0.63212	1.0	3.7183	9.3891
18.	i	0	1	2	3	4	5
		0.0	1.7	3.4	5.1	6.8	8.5
	$x_i$	0.0	3.0038	5.2439	7.3583	9.4077	11.415
1.0	$y_i$	0.0	3.0036	3.2439	7.3363	9.4077	11.41)
19.	i	0	1	2	3	4	5
		-0.7	-0.4	-0.1	0.2	0.5	0.8
	$x_i$	-1.4754	-0.81152	-0.20017	0.40136	1.0236	1.7273
20.	$y_i$	1,1,01	0,01101	0.2001	0.10100	1,0200	1.7270
20.	i	0	1	2	3	4	5
	$x_i$	-0.7	-0.4	-0.1	0.2	0.5	0.8
		1.6462	1.5823	1.571	1.5694	1.5472	1.4435
21.	$y_i$						
۷ ـ ٠	i	0	1	2	3	4	5
	$X_i$	-5.0	-3.0	-1.0	1.0	3.0	5.0
		-6.3734	-4.249	-1.7854	1.7854	4.249	6.3734
	$y_i$						

22.							
-	i	0	1	2	3	4	5
	$X_{i}$	-5.0	-3.0	-1.0	1.0	3.0	5.0
•	$y_i$	-2.0558	-0.18016	1.3562	1.7854	3.3218	5.1974
23.							
	i	0	1	2	3	4	5
	$x_{i}$	0.1	0.5	0.9	1.3	1.7	2.1
	$y_i$	10.	2.0	1.1111	0.76923	0.58824	0.47619
24.		_					1
	i	0	1	2	3	4	5
	$X_{i}$	0.1	0.5	0.9	1.3	1.7	2.1
	$y_{i}$	100.0	4.0	1.2346	0.59172	0.34602	0.22676
25.							
	i	0	1	2	3	4	5
	$X_{i}$	0.1	0.5	0.9	1.3	1.7	2.1
	$y_i$	10.1	2.5	2.0111	2.0692	2.2882	2.5762
26.		T -	-		_	-	
=	i	0	1	2	3	4	5
	$X_i$	0.1	0.5	0.9	1.3	1.7	2.1
	$y_i$	100.01	4.250	2.0446	2.2817	3.236	4.6368
27.		1 -				-	
-	i	0	1	2	3	4	5
-	$X_{i}$	-1.0	0.0	1.0	2.0	3.0	5.0
	$y_i$	0.5	0.0	0.5	1.7321	3.0	2.5
28.		T	-	_	_	-	
	i	0	1	2	3	4	5
-	$X_{i}$	-1.0	0.0	1.0	2.0	3.0	5.0
	$y_i$	-0.86603	0.0	0.86603	1.0	0.0	-4.3301
29.				0			
-	i	0	1	2	3	4	5
	$X_i$	-3.0	-2.0	-1.0	0.0	1.0	2.0
	$y_i$	-0.14936	-0.27067	-0.36788	0.0	2.7183	14.778
30.			1	^	2	4	
-	i	0	1 -1.2	2 -0.7	3 -0.2	0.3	5
	$\mathcal{X}_{i}$	-1.7					0.8
	$y_i$	0.52796	0.43372	0.24333	0.03275	0.12149	1.4243