

\*\*\*\*\*>Data pengamatan penuh

MTB > print c1-c6

ROW	X1	X2	X3	X4	X5	Y
1	350	1	2	2	5	1000
2	350	1	5	5	5	1400
3	350	0	4	4	4	1200
4	350	1	20	20	1	1800
5	425	0	10	2	3	2800
6	425	1	15	10	3	4000
7	425	0	1	1	4	2500
8	425	1	5	5	4	3000
9	600	1	10	5	2	3500
10	600	0	8	8	3	2800
11	600	0	4	3	4	2900
12	600	1	20	10	2	3800
13	600	1	7	7	5	4200
14	700	1	8	8	1	4600
15	700	0	25	15	5	5000
16	700	1	19	16	4	4600
17	700	0	20	14	5	4700
18	400	0	6	4	3	1800
19	400	1	20	8	3	3400
20	400	0	5	3	5	2000
21	500	1	22	12	3	3200
22	500	1	25	10	3	3200
23	500	0	8	3	4	2800
24	500	0	2	1	5	2400
25	800	1	10	10	3	5200
26	475	1	10	4	3	2400
27	475	0	3	3	4	2400
28	475	1	8	8	2	3000
29	475	1	6	6	4	2800
30	475	0	12	4	3	2500
31	475	0	4	2	5	2100

\*\*\*\*\*>Hasil data penuh

MTB > regres c6 on 5 pred c1-c5;

The regression equation is

$$Y = -1294 + 7.16 X1 + 337 X2 + 46.1 X3 - 16.4 X4 + 29.5 X5$$

Predictor	Coef	Stdev	t-ratio	p
Constant	-1293.6	540.1	-2.39	0.024
X1	7.1552	0.8120	8.81	0.000
X2	336.6	206.0	1.63	0.115
X3	46.06	21.48	2.14	0.042
X4	-16.37	35.30	-0.46	0.647
X5	29.51	85.57	0.34	0.733

s = 490.9      R-sq = 83.6%      R-sq(adj) = 80.3%

#### Analysis of Variance

SOURCE	DF	SS	MS	F	P
Regression	5	30634578	6126915	25.42	0.000
Error	25	6025422	241017		
Total	30	36660000			

SOURCE	DF	SEQ SS
X1	1	27222162
X2	1	1519703
X3	1	1807475
X4	1	56565
X5	1	28672

#### Unusual Observations

Obs.	X1	Y	Fit	Stdev.Fit	Residual	St.Resid
4	350	1800.0	2170.7	410.1	-370.7	-1.37 X
6	425	4000.0	2699.8	149.7	1300.2	2.78R

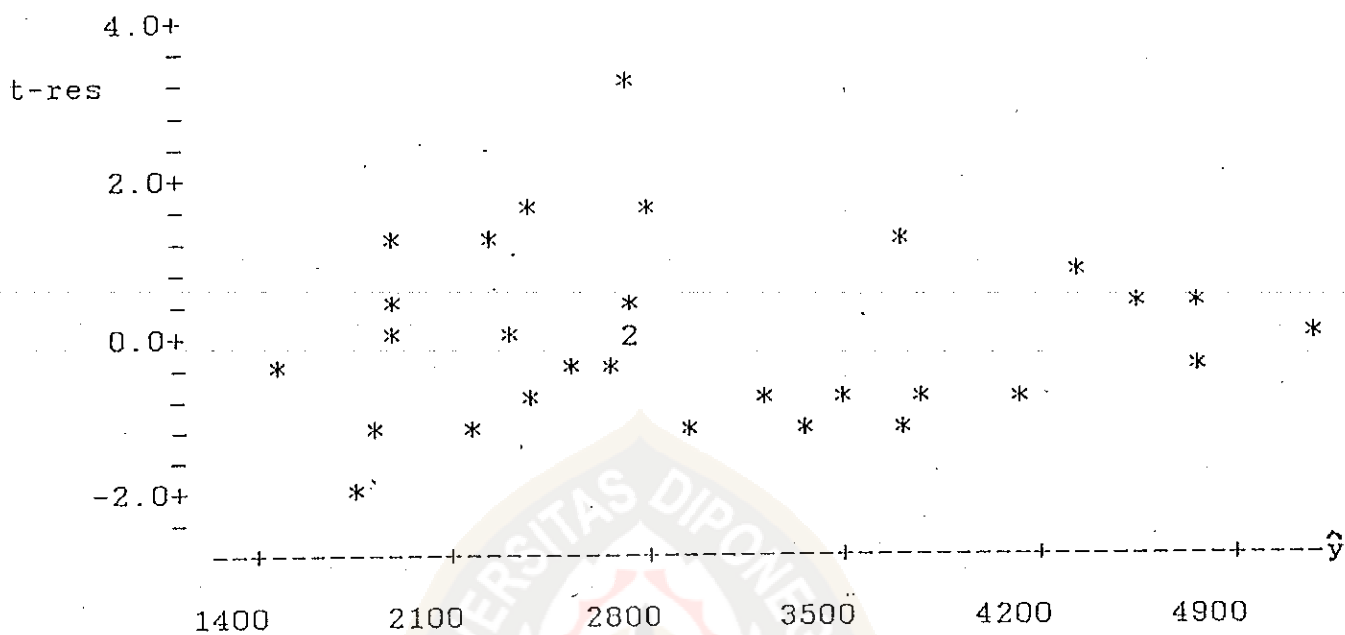
R denotes an obs. with a large st. resid.

X denotes an obs. whose X value gives it large influence.

MTB > print c7-c10

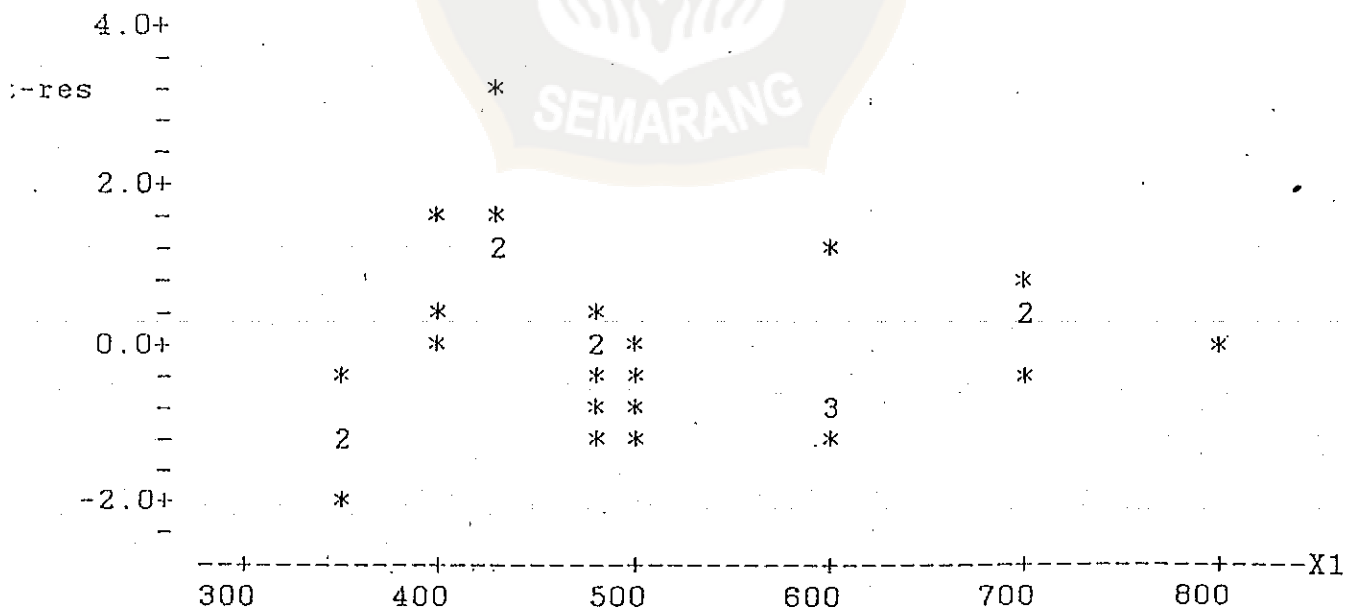
ROW	resid	t-res	pii	y-pred
1	-754.30	-1.83815	0.234838	1754.30
2	-443.38	-1.02597	0.223488	1843.38
3	-247.59	-0.53828	0.147132	1447.59
4	-370.70	-1.39955	0.697743	2170.70
5	536.18	1.21927	0.182011	2263.82
6	1300.24	3.27880	0.093029	2699.76
7	604.84	1.32695	0.111725	1895.16
8	649.49	1.43733	0.116672	2350.51
9	-273.95	-0.61032	0.185019	3773.95
10	-525.65	-1.17849	0.161690	3325.65
11	-352.77	-0.76060	0.122515	3252.77
12	-352.71	-0.78055	0.166032	4152.71
13	508.43	1.16792	0.202254	3691.57
14	281.27	0.70083	0.345319	4318.73
15	231.34	0.58730	0.373067	4768.66
16	-182.99	-0.41967	0.237124	4782.99
17	-145.28	0.34729	0.299483	4554.72
18	-67.96	-0.14594	0.135544	1867.96
19	616.08	1.45001	0.217954	2783.92
20	102.70	0.21845	0.117798	1897.30
21	-326.09	-0.70862	0.138895	3526.09
22	-497.01	-1.20777	0.284510	3697.01
23	78.51	0.16418	0.088047	2721.49
24	-107.37	-0.22851	0.118648	2507.37
25	47.33	0.11252	0.294777	5152.67
26	-525.43	-1.14756	0.119161	2925.43
27	87.70	0.18391	0.092985	2312.30
28	261.68	0.56510	0.134508	2738.32
29	62.04	0.13087	0.104268	2737.96
30	-180.97	-0.39302	0.150068	2680.97
31	-304.25	-0.64694	0.103696	2404.25

MTB > plot c8 c10



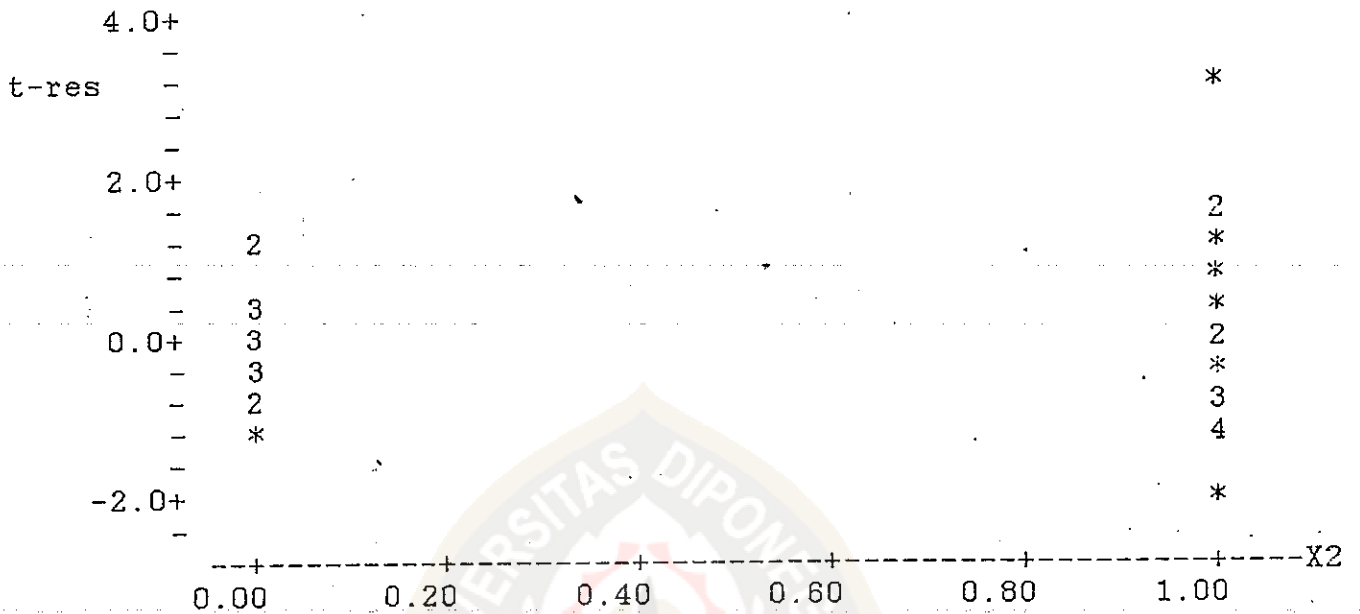
Gambar L.1. Diagram pencar antara  $r_i$  dengan  $y\text{-pred}$

MTB > plot c8 c1



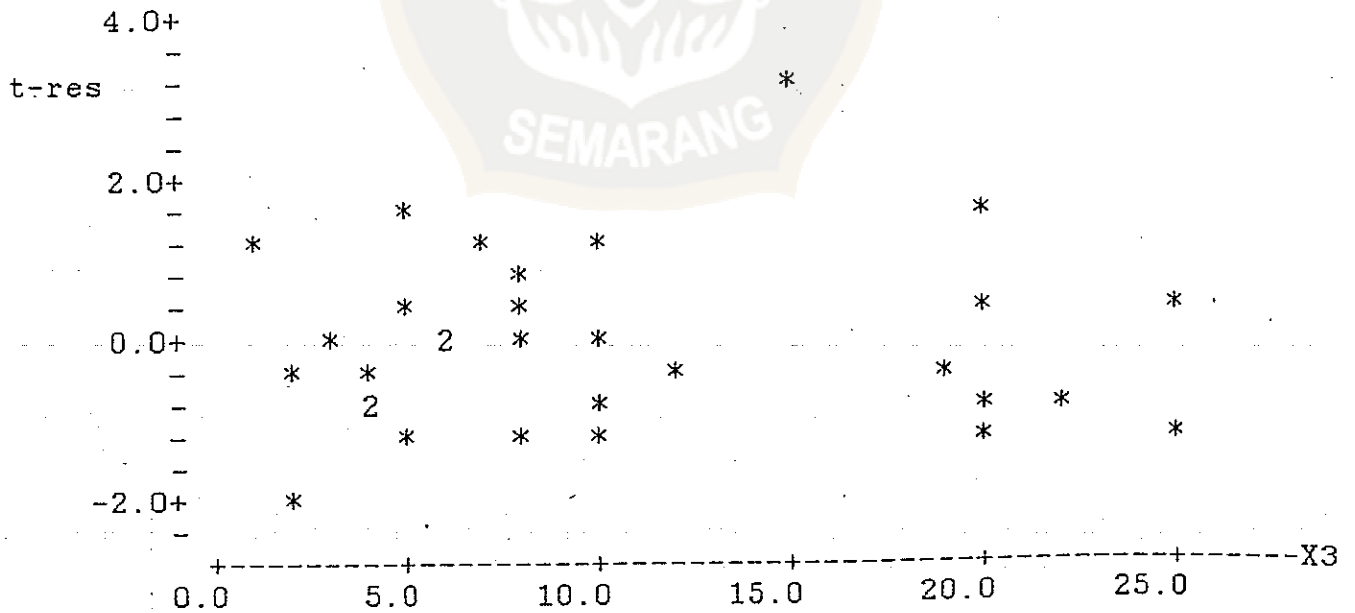
Gambar L.2. Diagram pencar antara  $r_i$  dengan  $X_1$

MTB > plot c8 c2



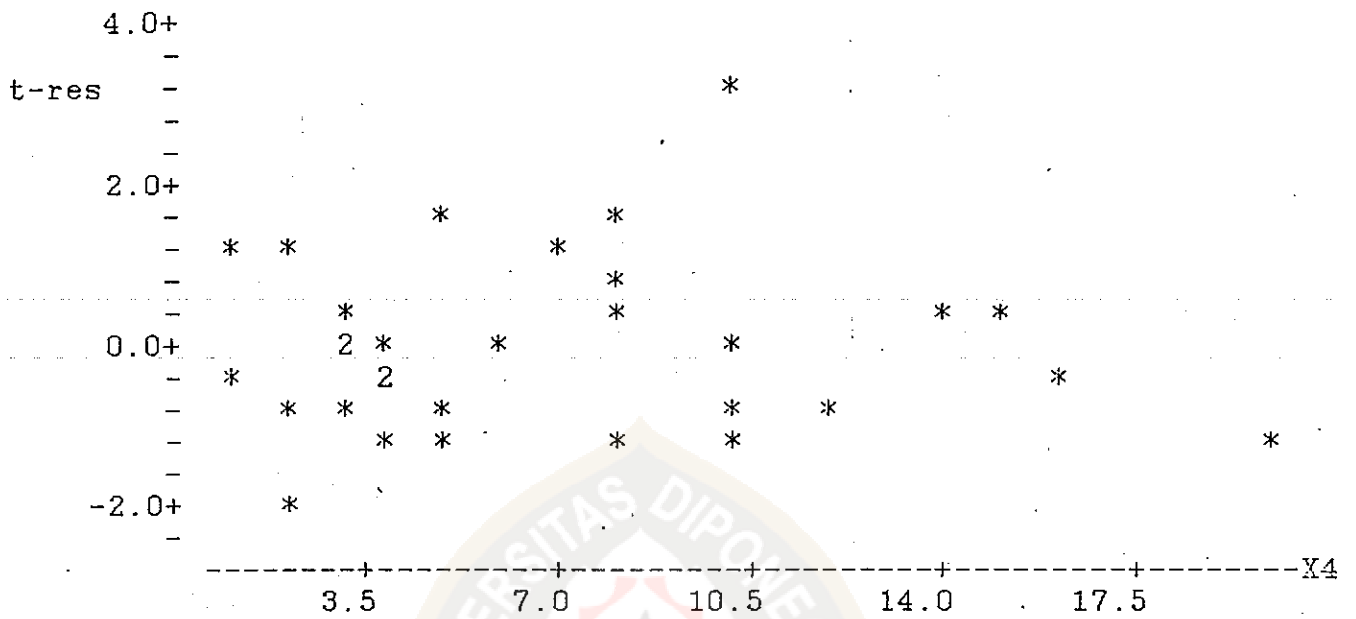
Gambar L.3. Diagram pencar antara  $r_i$  dengan  $X_2$

MTB > plot c8 c3



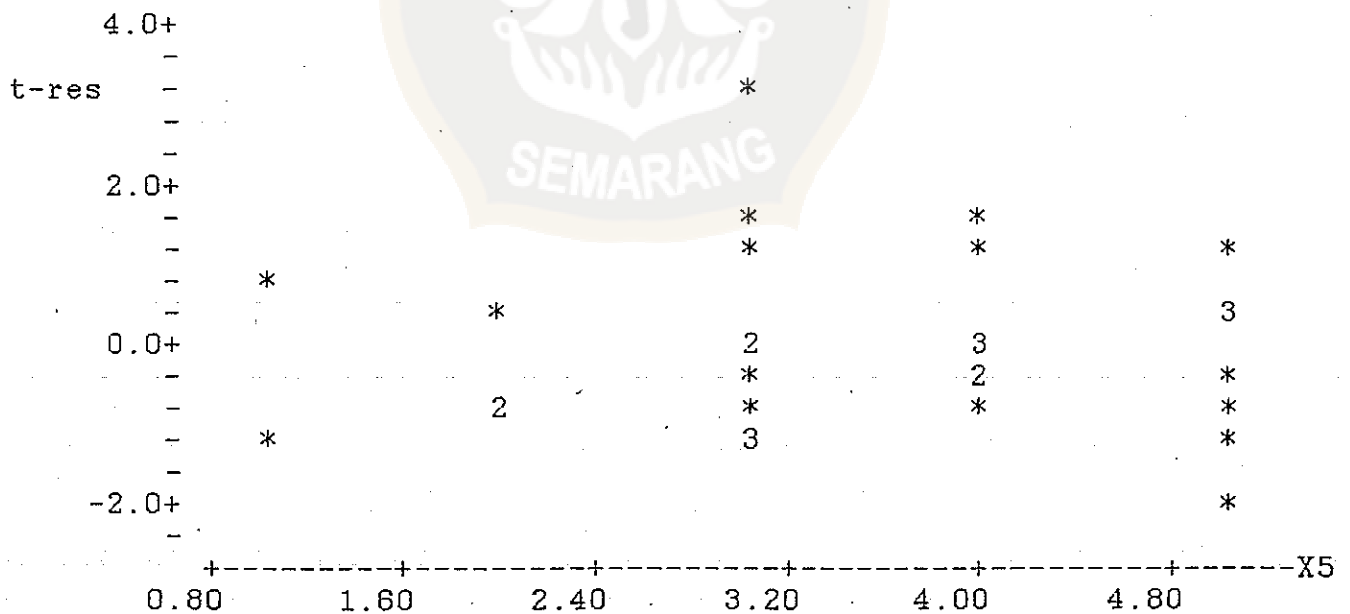
Gambar L.4. Diagram pencar antara  $r_i$  dengan  $X_3$

MTB > plot c8 c4



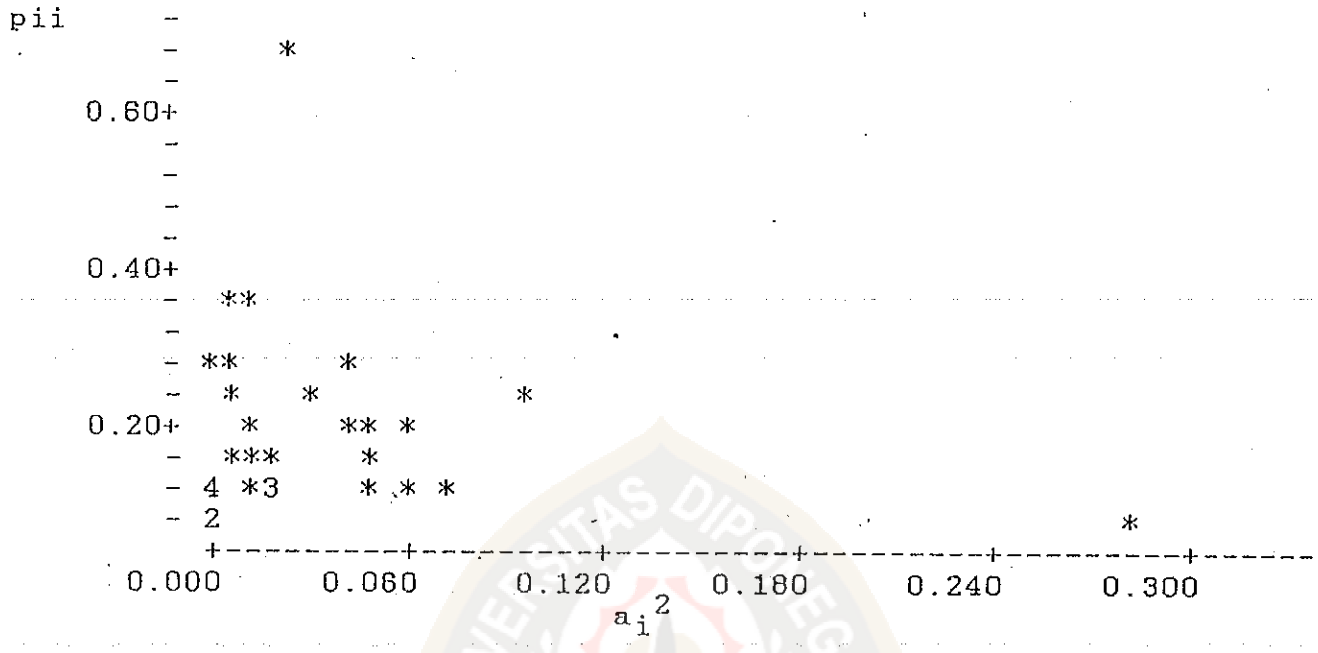
Gambar L.5. Diagram pencar antara  $r_i$  dengan  $X_4$

MTB > plot c8 c5



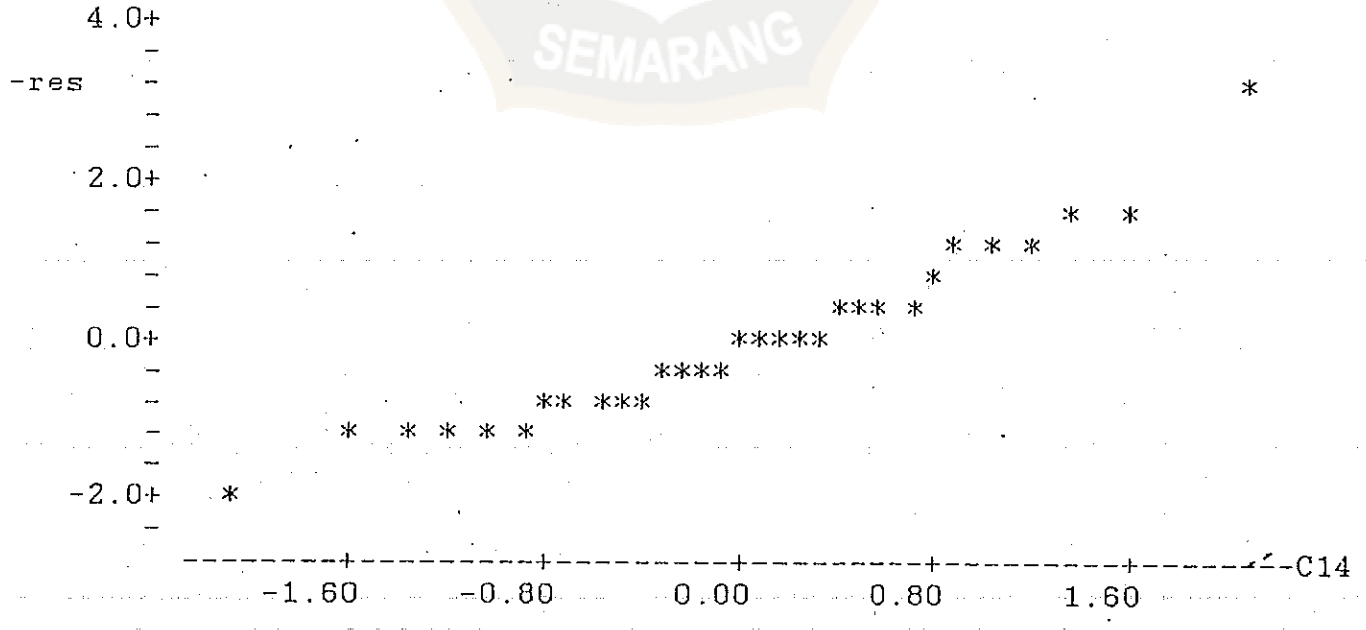
Gambar L.6. Diagram pencar antara  $r_i$  dengan  $X_5$

MTB > plot c8 c13



Gambar L.7. Diagram pencar antara  $r_i$  dengan  $a_i^2$

TB > plot c8 c14



Gambar L.8. Plot Normal

\*\*\*\*\*>Data pengamatan ke-1 dihapus

MTB > print c1-c6

ROW	X1	X2	X3	X4	X5	Y
1	350	1	5	5	5	1400
2	350	0	4	4	4	1200
3	350	1	20	20	1	1800
4	425	0	10	2	3	2800
5	425	1	15	10	3	4000
6	425	0	1	1	4	2500
7	425	1	5	5	4	3000
8	600	1	10	5	2	3500
9	600	0	8	8	3	2800
10	600	0	4	3	4	2900
11	600	1	20	10	2	3800
12	600	1	7	7	5	4200
13	700	1	8	8	1	4600
14	700	0	25	15	5	5000
15	700	1	19	16	4	4600
16	700	0	20	14	5	4700
17	400	0	6	4	3	1800
18	400	1	20	8	3	3400
19	400	0	5	3	5	2000
20	500	1	22	12	3	3200
21	500	1	25	10	3	3200
22	500	0	8	3	4	2800
23	500	0	2	1	5	2400
24	800	1	10	10	3	5200
25	475	1	10	4	3	2400
26	475	0	3	3	4	2400
27	475	1	8	8	2	3000
28	475	1	6	6	4	2800
29	475	0	12	4	3	2500
30	475	0	4	2	5	2100



\*\*\*\*\*>Hasil pengamatan ke-1 dihapus

MTB > regre c6 on 5 pred c1-c5

The regression equation is  
 $Y = -1319 + 6.91 X1 + 463 X2 + 43.0 X3 - 18.5 X4 + 75.2 X5$

Predictor	Coef	Stdev	t-ratio	P
Constant	-1318.9	516.3	-2.55	0.017
X1	6.9054	0.7877	8.77	0.000
X2	463.1	208.5	2.22	0.036
X3	42.96	20.59	2.09	0.048
X4	-18.54	33.75	-0.55	0.588
X5	75.17	85.46	0.88	0.388

X s = 469.1      R-sq = 83.8%      R-sq(adj) = 80.4%

Analysis of Variance

SOURCE	DF	SS	MS	F	P
Regression	5	27244840	5448968	24.76	0.000
Error	24	5281827	220076		
Total	29	32526668			

SOURCE	DF	SEQ SS
X1	1	23726948
X2	1	1966622
X3	1	1304517
X4	1	76484
X5	1	170268

Unusual Observations

Obs.	X1	Y	Fit	Stdev.Fit	Residual	St.Resid
3	350	1800.0	2124.7	392.7	-324.7	-1.26 X
5	425	4000.0	2763.5	147.2	1236.5	2.78R

R denotes an obs. with a large st. resid.  
 X denotes an obs. whose X value gives it large influence.

\*\*\*\*\*>Data pengamatan ke-4 dihapus

MTB > print c1-c6

ROW	X1	X2	X3	X4	X5	Y
1	350	1	2	2	5	1000
2	350	1	5	5	5	1400
3	350	0	4	4	4	1200
4	425	0	10	2	3	2800
5	425	1	15	10	3	4000
6	425	0	1	1	4	2500
7	425	1	5	5	4	3000
8	600	1	10	5	2	3500
9	600	0	8	8	3	2800
10	600	0	4	3	4	2900
11	600	1	20	10	2	3800
12	600	1	7	7	5	4200
13	700	1	8	8	1	4600
14	700	0	25	15	5	5000
15	700	1	19	16	4	4600
16	700	0	20	14	5	4700
17	400	0	6	4	3	1800
18	400	1	20	8	3	3400
19	400	0	5	3	5	2000
20	500	1	22	12	3	3200
21	500	1	25	10	3	3200
22	500	0	8	3	4	2800
23	500	0	2	1	5	2400
24	800	1	10	10	3	5200
25	475	1	10	4	3	2400
26	475	0	3	3	4	2400
27	475	1	8	8	2	3000
28	475	1	6	6	4	2800
29	475	0	12	4	3	2500
30	475	0	4	2	5	2100

\*\*\*\*\*>Hasil pengamatan ke-4 dihapus

MTB > regr e6 on 5 pred c1-c5

The regression equation is

$$Y = -674 + 6.17 X1 + 232 X2 + 28.2 X3 + 38.8 X4 - 31.0 X5$$

Predictor	Coef	Stdev	t-ratio	p
Constant	-674.1	690.6	-0.98	0.339
X1	6.170	1.063	5.80	0.000
X2	232.5	215.4	1.08	0.291
X3	28.21	24.64	1.14	0.264
X4	38.76	52.46	0.74	0.467
X5	-30.99	94.45	-0.33	0.746

s = 481.8

R-sq = 84.2%

R-sq(adj) = 80.9%

Analysis of Variance

SOURCE	DF	SS	MS	F	p
Regression	5	29601230	5920246	25.51	0.000
Error	24	5570770	232115		
Total	29	35172000			

SOURCE	DF	SEQ SS
X1	1	25735692
X2	1	1554031
X3	1	2182241
X4	1	104280
X5	1	24986

Unusual Observations

Obs.	X1	Y	Fit	Stdev.Fit	Residual	St.Resid
5	425	4000.0	2898.6	204.4	1101.4	2.52R

R denotes an obs. with a large st. resid.

\*\*\*\*\*>Data pengamatan ke-6 dihapus

MTB > print c1-c6

ROW.	X1	X2	X3	X4	X5	Y
1	350	1	2	2	5	1000
2	350	1	5	5	5	1400
3	350	0	4	4	4	1200
4	350	1	20	20	1	1800
5	425	0	10	2	3	2800
6	425	0	1	1	4	2500
7	425	1	5	5	4	3000
8	600	1	10	5	2	3500
9	600	0	8	8	3	2800
10	600	0	4	3	4	2900
11	600	1	20	10	2	3800
12	600	1	7	7	5	4200
13	700	1	8	8	1	4600
14	700	0	25	15	5	5000
15	700	1	19	16	4	4600
16	700	0	20	14	5	4700
17	400	0	6	4	3	1800
18	400	1	20	8	3	3400
19	400	0	5	3	5	2000
20	500	1	22	12	3	3200
21	500	1	25	10	3	3200
22	500	0	8	3	4	2800
23	500	0	2	1	5	2400
24	800	1	10	10	3	5200
25	475	1	10	4	3	2400
26	475	0	3	3	4	2400
27	475	1	8	8	2	3000
28	475	1	6	6	4	2800
29	475	0	12	4	3	2500
30	475	0	4	2	5	2100

\*\*\*\*\*>Hasil pengamatan ke-6 dihapus

MTB > regre c6 on 5 pred c1-c5

The regression equation is

$$Y = -1455 + 7.56 X1 + 278 X2 + 44.2 X3 - 22.3 X4 + 29.5 X5$$

Predictor	Coef	Stdev	t-ratio	p
Constant	-1455.5	460.8	-3.16	0.004
X1	7.5636	0.6999	10.81	0.000
X2	278.3	175.6	1.58	0.126
X3	44.22	18.23	2.43	0.023
X4	-22.29	29.99	-0.74	0.465
X5	29.53	72.58	0.41	0.688

s = 416.4

R-sq = 88.3%

R-sq(adj) = 85.9%

Analysis of Variance

SOURCE	DF	SS	MS	F	P
Regression	5	31465284	6293057	36.29	0.000
Error	24	4161382	173391		
Total	29	35626668			

SOURCE	DF	SEQ SS
X1	1	29048784
X2	1	910340
X3	1	1375224
X4	1	102240
X5	1	28696

Unusual Observations

Obs.	X1	Y	Fit	Stdev.Fit	Residual	St.Resid
4	350	1800.0	1938.3	355.0	-138.3	-0.64 X
18	400	3400.0	2643.0	199.1	757.0	2.07R

R denotes an obs. with a large st. resid.

X denotes an obs. whose X value gives it large influence.

MTB > stop

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