

Tabel 3.1. Koordinat Kelengkungan Parabola

X (cm)	Y (cm)	dY/dX	Sudut
0.0	0.00	0.000000	0.000000
0.5	0.00	0.004545	0.260434
1.0	0.00	0.009091	0.520856
1.5	0.01	0.013636	0.781258
2.0	0.02	0.018182	1.041627
2.5	0.03	0.022727	1.301953
3.0	0.04	0.027273	1.562225
3.5	0.06	0.031818	1.822433
4.0	0.07	0.036364	2.082565
4.5	0.09	0.040909	2.342612
5.0	0.11	0.045455	2.602562
5.5	0.14	0.050000	2.862406
6.0	0.16	0.054545	3.122131
6.5	0.19	0.059091	3.381728
7.0	0.22	0.063636	3.641186
7.5	0.26	0.068182	3.900494
8.0	0.29	0.072727	4.159643
8.5	0.33	0.077273	4.418621
9.0	0.37	0.081818	4.677418
9.5	0.41	0.086364	4.936025
10.0	0.45	0.090909	5.194429
10.5	0.50	0.095455	5.452623
11.0	0.55	0.100000	5.710594
11.5	0.60	0.104545	5.968333
12.0	0.65	0.109091	6.225830
12.5	0.71	0.113636	6.483074
13.0	0.77	0.118182	6.740057
13.5	0.83	0.122727	6.996767
14.0	0.89	0.127273	7.253195
14.5	0.96	0.131818	7.509332
15.0	1.02	0.136364	7.765167
15.5	1.09	0.140909	8.020691
16.0	1.16	0.145455	8.275894
16.5	1.24	0.150000	8.530766
17.0	1.31	0.154545	8.785300
17.5	1.39	0.159091	9.039484
18.0	1.47	0.163636	9.293310
18.5	1.56	0.168182	9.546768
19.0	1.64	0.172727	9.799850
19.5	1.73	0.177273	10.052546
20.0	1.82	0.181818	10.304847
20.5	1.91	0.186364	10.556746
21.0	2.00	0.190909	10.808232
21.5	2.10	0.195455	11.059297
22.0	2.20	0.200000	11.309934
22.5	2.30	0.204545	11.560132
23.0	2.40	0.209091	11.809884
23.5	2.51	0.213636	12.059182
24.0	2.62	0.218182	12.308017

X (cm)	Y (cm)	dY/dX	Sudut
24.5	2.73	0.222727	12.556381
25.0	2.84	0.227273	12.804267
25.5	2.96	0.231818	13.051667
26.0	3.07	0.236364	13.298572
26.5	3.19	0.240909	13.544975
27.0	3.31	0.245455	13.790868
27.5	3.44	0.250000	14.036245
28.0	3.56	0.254545	14.281097
28.5	3.69	0.259091	14.525418
29.0	3.82	0.263636	14.769200
29.5	3.96	0.268182	15.012436
30.0	4.09	0.272727	15.255120
30.5	4.23	0.277273	15.497245
31.0	4.37	0.281818	15.738803
31.5	4.51	0.286364	15.979789
32.0	4.65	0.290909	16.220195
32.5	4.80	0.295455	16.460016
33.0	4.95	0.300000	16.699246
33.5	5.10	0.304545	16.937877
34.0	5.25	0.309091	17.175905
34.5	5.41	0.313636	17.413323
35.0	5.57	0.318182	17.650126
35.5	5.73	0.322727	17.886307
36.0	5.89	0.327273	18.121862
36.5	6.06	0.331818	18.356784
37.0	6.22	0.336364	18.591069
37.5	6.39	0.340909	18.824712
38.0	6.56	0.345455	19.057706
38.5	6.74	0.350000	19.290048
39.0	6.91	0.354545	19.521732
39.5	7.09	0.359091	19.752754
40.0	7.27	0.363636	19.983108
40.5	7.46	0.368182	20.212791
41.0	7.64	0.372727	20.441798
41.5	7.83	0.377273	20.670125
42.0	8.02	0.381818	20.897767
42.5	8.21	0.386364	21.124721
43.0	8.40	0.390909	21.350982
43.5	8.60	0.395455	21.576547
44.0	8.80	0.400000	21.801411
44.5	9.00	0.404545	22.025572
45.0	9.20	0.409091	22.249026
45.5	9.41	0.413636	22.471768
46.0	9.62	0.418182	22.693797
46.5	9.83	0.422727	22.915108
47.0	10.04	0.427273	23.135699
47.5	10.26	0.431818	23.355567
48.0	10.47	0.436364	23.574708
48.5	10.69	0.440909	23.793121

X (cm)	Y (cm)	dY/dX	Sudut
49.0	10.91	0.445455	24.010801
49.5	11.14	0.450000	24.227747
50.0	11.36	0.454546	24.443957
50.5	11.59	0.459091	24.659427
51.0	11.82	0.463636	24.874156
51.5	12.06	0.468182	25.088141
52.0	12.29	0.472727	25.301381
52.5	12.53	0.477273	25.513873
53.0	12.77	0.481818	25.725615
53.5	13.01	0.486364	25.936606
54.0	13.25	0.490909	26.146844
54.5	13.50	0.495455	26.356327
55.0	13.75	0.500000	26.565053
55.5	14.00	0.504546	26.773023
56.0	14.25	0.509091	26.980233
56.5	14.51	0.513636	27.186683
57.0	14.77	0.518182	27.392372
57.5	15.03	0.522727	27.597298
58.0	15.29	0.527273	27.801461
58.5	15.56	0.531818	28.004860
59.0	15.82	0.536364	28.207493
59.5	16.09	0.540909	28.409361
60.0	16.36	0.545455	28.610462
60.5	16.64	0.550000	28.810796
61.0	16.91	0.554546	29.010363
61.5	17.19	0.559091	29.209161
62.0	17.47	0.563636	29.407192
62.5	17.76	0.568182	29.604453
63.0	18.04	0.572727	29.800946
63.5	18.33	0.577273	29.996670
64.0	18.62	0.581818	30.191625
64.5	18.91	0.586364	30.385812
65.0	19.20	0.590909	30.579229
65.5	19.50	0.595455	30.771878
66.0	19.80	0.600000	30.963759
66.5	20.10	0.604546	31.154872
67.0	20.40	0.609091	31.345217
67.5	20.71	0.613636	31.534794
68.0	21.02	0.618182	31.723606
68.5	21.33	0.622727	31.911650
69.0	21.64	0.627273	32.098930
69.5	21.96	0.631818	32.285444
70.0	22.27	0.636364	32.471195
70.5	22.59	0.640909	32.656182
71.0	22.91	0.645455	32.840407
71.5	23.24	0.650000	33.023870
72.0	23.56	0.654546	33.206573
72.5	23.89	0.659091	33.388516
73.0	24.22	0.663636	33.569701
73.5	24.56	0.668182	33.750129
74.0	24.89	0.672727	33.929800

X (cm)	Y (cm)	dY/dX	Sudut
74.5	25.23	0.677273	34.108717
75.0	25.57	0.681818	34.286880
75.5	25.91	0.686364	34.464290
76.0	26.25	0.690909	34.640950
76.5	26.60	0.695455	34.816861
77.0	26.95	0.700000	34.992023
77.5	27.30	0.704546	35.166439
78.0	27.65	0.709091	35.340110
78.5	28.01	0.713636	35.513037
79.0	28.37	0.718182	35.685223
79.5	28.73	0.722727	35.856669
80.0	29.09	0.727273	36.027376
80.5	29.46	0.731818	36.197347
81.0	29.82	0.736364	36.366583
81.5	30.19	0.740909	36.535086
82.0	30.56	0.745455	36.702858
82.5	30.94	0.750000	36.869900
83.0	31.31	0.754546	37.036216
83.5	31.69	0.759091	37.201806
84.0	32.07	0.763636	37.366672
84.5	32.46	0.768182	37.530817
85.0	32.84	0.772727	37.694243
85.5	33.23	0.777273	37.856952
86.0	33.62	0.781818	38.018945
86.5	34.01	0.786364	38.180226
87.0	34.40	0.790909	38.340796
87.5	34.80	0.795455	38.500657
88.0	35.20	0.800000	38.659811
88.5	35.60	0.804546	38.818261
89.0	36.00	0.809091	38.976010
89.5	36.41	0.813636	39.133058
90.0	36.82	0.818182	39.289410
90.5	37.23	0.822727	39.445066
91.0	37.64	0.827273	39.600029
91.5	38.06	0.831818	39.754303
92.0	38.47	0.836364	39.907888
92.5	38.89	0.840909	40.060787
93.0	39.31	0.845455	40.213004
93.5	39.74	0.850000	40.364539
94.0	40.16	0.854546	40.515397
94.5	40.59	0.859091	40.665578
95.0	41.02	0.863636	40.815087
95.5	41.46	0.868182	40.963924
96.0	41.89	0.872727	41.112093
96.5	42.33	0.877273	41.259597
97.0	42.77	0.881818	41.406437
97.5	43.21	0.886364	41.552616
98.0	43.65	0.890909	41.698137
98.5	44.10	0.895455	41.843003
99.0	44.55	0.900000	41.987215
99.5	45.00	0.904546	42.130778

X (cm)	Y (cm)	dY/dX	Sudut
100.0	45.45	0.909091	42.273692
100.5	45.91	0.913636	42.415961
101.0	46.37	0.918182	42.557588
101.5	46.83	0.922727	42.696574
102.0	47.29	0.927273	42.838923
102.5	47.76	0.931818	42.978638
103.0	48.22	0.936364	43.117720
103.5	48.69	0.940909	43.256174
104.0	49.16	0.945455	43.394000
104.5	49.64	0.950000	43.531202
105.0	50.11	0.954546	43.667783
105.5	50.59	0.959091	43.803745
106.0	51.07	0.963636	43.939091
106.5	51.56	0.968182	44.073824
107.0	52.04	0.972727	44.207946
107.5	52.53	0.977273	44.341460
108.0	53.02	0.981818	44.474368
108.5	53.51	0.986364	44.606674
109.0	54.00	0.990909	44.738380
109.5	54.50	0.995455	44.869489
110.0	55.00	1.000000	45.000003
110.5	55.50	1.004546	45.129925
111.0	56.00	1.009091	45.259258
111.5	56.51	1.013636	45.388004
112.0	57.02	1.018182	45.516167
112.5	57.53	1.022727	45.643749
113.0	58.04	1.027273	45.770752
113.5	58.56	1.031818	45.897179
114.0	59.07	1.036364	46.023033
114.5	59.59	1.040909	46.148317
115.0	60.11	1.045455	46.273033
115.5	60.64	1.050000	46.397184
116.0	61.16	1.054546	46.520773
116.5	61.69	1.059091	46.643801
117.0	62.22	1.063636	46.766273
117.5	62.76	1.068182	46.888191
118.0	63.29	1.072727	47.009557
118.5	63.83	1.077273	47.130373
119.0	64.37	1.081818	47.250644
119.5	64.91	1.086364	47.370370
120.0	65.45	1.090909	47.489556
120.5	66.00	1.095455	47.608203
121.0	66.55	1.100000	47.726314
121.5	67.10	1.104546	47.843892
122.0	67.65	1.109091	47.960939
122.5	68.21	1.113636	48.077458
123.0	68.77	1.118182	48.193452
123.5	69.33	1.122727	48.308923
124.0	69.89	1.127273	48.423874

Tabel 3.2. Data hasil pengukuran pada tanggal 2 Desember 2001

No	Jam	Suhu Absorber di Kolektor (C)	Suhu Air di Tungku (C)	T2 - T1 (C)	dT (T2 - T0) (C)	Intensitas Matahari (W/m)	Daya Masak (Watt)	Daya Masak Bobot (Watt)
1	11:03	43	37.0		11.0	672		
2	11:13	45	41.1	4.1	15.1	680	176.2	181.4
3	11:23	46	45.3	4.2	19.3	690	180.5	183.1
4	11:33	50	49.7	4.4	23.7	713	189.1	185.6
5	11:43	55	54.3	4.6	28.3	748	197.7	185.0
6	11:53	68	59.3	5.0	33.3	774	214.9	194.3
7	12:03	73	64.4	5.1	38.4	804	219.2	190.8
8	12:13	78	70.0	5.6	44.0	857	240.7	196.6
9	12:23	89	76.5	6.5	50.5	987	279.3	198.1
10	12:33	95	83.4	6.9	57.4	1014	296.5	204.7
11	12:43	112	90.8	7.4	64.3	1020	318.0	218.3

T0 (Suhu lingkungan) = 26 C
 R (Koefisien Korelasi) = 0.908
 Daya Masak Standart = 197.9 Watt

Tabel 3.3. Data hasil pengukuran pada tanggal 3 Desember 2001

No	Jam	Suhu Absorber di Kolektor (C)	Suhu Air di Tungku (C)	T2 - T1 (C)	dT (T2 - T0) (C)	Intensitas Matahari (W/m)	Daya Masak (Watt)	Daya Masak Bobot (Watt)
1	10:47	42	36.5		10.5	672		
2	10:57	43	40.5	4.0	14.5	680	171.9	177.0
3	11:07	45	44.6	4.1	18.6	703	176.2	175.5
4	11:17	51	48.9	4.3	22.9	737	184.8	175.5
5	11:27	57	53.4	4.5	27.4	766	193.4	176.7
6	11:37	65	58.3	4.9	32.3	810	210.6	182.0
7	11:47	72	63.5	5.2	37.5	838	223.5	186.7
8	11:57	79	69.2	5.7	43.2	872	245.0	196.6
9	12:07	91	75.5	6.3	49.5	955	270.8	198.5
10	12:17	97	82.9	7.4	56.9	997	318.0	223.3
11	12:27	115	90.3	7.4	64.3	984	318.0	226.2

T0 (Suhu lingkungan) = 26 C
 R (Koefisien Korelasi) = 0.901
 Daya Masak Standart = 198.7 Watt

Tabel 3.4. Data hasil pengukuran pada tanggal 5 Desember 2001

No	Jam	Suhu Absorber di Kolektor (C)	Suhu Air di Tungku (C)	T2 - T1 (C)	dT (T2 - T0) (C)	Intensitas Matahari (W/m)	Daya Masak (Watt)	Daya Masak Bobot (Watt)
1	10:12	44	36.5		10.3	663		
2	10:22	45	40.4	3.9	14.2	679	167.6	172.8
3	10:32	46	44.4	4.0	18.2	704	171.9	170.9
4	10:42	48	48.6	4.2	22.4	727	180.5	173.8
5	10:52	51	52.9	4.3	26.7	756	184.8	171.1
6	11:02	64	57.5	4.6	31.3	789	197.7	175.4
7	11:12	71	62.7	5.2	36.5	829	223.5	188.7
8	11:22	79	68.5	5.8	42.3	889	249.3	196.3
9	11:32	85	74.8	6.3	48.6	959	270.8	197.6
10	11:42	93	81.9	7.1	55.7	979	305.1	218.2
11	11:52	118	89.1	7.2	62.9	990	309.4	218.8

T0 (Suhu lingkungan) = 26.2 C
 R (Koefisien Korelasi) = 0.913
 Daya Masak Standart = 199.3 Watt

Tabel 3.5. Data hasil pengukuran pada tanggal 6 Desember 2001

No	Jam	Suhu Absorber di Kolektor (C)	Suhu Air di Tungku (C)	T2 - T1 (C)	dT (T2 - T0) (C)	Intensitas Matahari (W/m)	Daya Masak (Watt)	Daya Masak Bobot (Watt)
1	10:23	41	37.5		11.4	661		
2	10:33	42	41.3	3.8	15.2	677	163.3	168.9
3	10:43	44	45.3	4.0	19.2	705	171.9	170.7
4	10:53	48	49.4	4.1	23.3	731	176.2	168.7
5	11:03	55	53.8	4.4	27.7	758	189.1	174.6
6	11:13	62	58.7	4.9	32.6	771	210.6	191.2
7	11:23	73	64.0	5.3	37.9	827	227.8	192.8
8	11:33	82	69.7	5.7	43.6	878	245.0	195.3
9	11:43	89	76.2	6.5	50.1	973	279.3	201.0
10	11:53	97	83.7	7.5	57.6	1005	322.3	224.5
11	12:03	121	91.4	7.7	65.3	1008	330.9	229.8

T0 (Suhu lingkungan) = 26.1 C
 R (Koefisien Korelasi) = 0.946
 Daya Masak Standart = 199.5 Watt

Tabel 3.6. Data hasil pengukuran pada tanggal 8 Desember 2001

No	Jam	Suhu Absorber di Kolektor ($^{\circ}\text{C}$)	Suhu Air di Tungku ($^{\circ}\text{C}$)	$T_2 - T_1$ ($^{\circ}\text{C}$)	dT ($T_2 - T_0$) ($^{\circ}\text{C}$)	Intensitas Matahari (W/m^2)	Daya Masak (Watt)	Daya Masak Bobot (Watt)
1	10:15	39	38.0		12.0	658		
2	10:25	43	41.9	3.9	15.9	676	167.6	173.6
3	10:35	47	46.0	4.1	20.0	712	176.2	173.2
4	10:45	56	50.3	4.3	24.3	736	184.8	175.8
5	10:55	68	54.9	4.6	28.9	755	197.7	183.3
6	11:05	75	59.8	4.9	33.8	769	210.6	191.7
7	11:15	83	65.0	5.2	39.0	821	223.5	190.5
8	11:25	92	70.8	5.8	44.8	876	249.3	199.2
9	11:35	102	77.3	6.5	51.3	964	279.3	202.8
10	11:45	118	84.4	7.1	58.4	1002	305.1	213.2
11	11:55	123	91.7	7.3	65.7	1012	313.7	217.0

T_0 (Suhu lingkungan) = 26 $^{\circ}\text{C}$
 R (Koefisien Korelasi) = 0.979
 Daya Masak Standart = 200.7 Watt

Tabel 3.7. Data hasil pengukuran pada tanggal 9 Desember 2001

No	Jam	Suhu Absorber di Kolektor (C)	Suhu Air di Tungku (C)	T2 - T1 (C)	dT (T2 - T0) (C)	Intensitas Matahari (W/m)	Daya Masak (Watt)	Daya Masak Bobot (Watt)
1	10:09	41	39.4		13.4	658		
2	10:19	43	43.4	4.0	17.4	676	171.9	178.0
3	10:29	47	47.6	4.2	21.6	712	180.5	177.5
4	10:39	55	52.1	4.5	26.1	754	193.4	179.5
5	10:49	67	57.0	4.9	31.0	766	210.6	192.4
6	10:59	78	62.3	5.3	36.3	821	227.8	194.2
7	11:09	84	68.1	5.8	42.1	887	249.3	196.7
8	11:19	93	74.5	6.4	48.5	976	275.0	197.3
9	11:29	103	81.2	6.7	55.2	965	287.9	208.9
10	11:39	114	88.4	7.2	62.4	999	309.4	216.8
11	11:49	126	96.1	7.7	70.1	1010	330.9	229.3

T0 (Suhu lingkungan) = 26 C
 R (Koefisien Korelasi) = 0.953
 Daya Masak Standart = 198.9 Watt

Tabel 3.8. Data hasil pengukuran pada tanggal 12 Desember 2001

No	Jam	Suhu Absorber di Kolektor ($^{\circ}\text{C}$)	Suhu Air di Tungku ($^{\circ}\text{C}$)	$T_2 - T_1$ ($^{\circ}\text{C}$)	dT ($T_2 - T_0$) ($^{\circ}\text{C}$)	Intensitas Matahari (W/m)	Daya Masak (Watt)	Daya Masak Bobot (Watt)
1	10:18	40	38.7		12.6	661		
2	10:28	43	42.6	3.9	16.5	673	167.6	174.3
3	10:38	47	46.7	4.1	20.6	705	176.2	175.0
4	10:48	56	51.0	4.3	24.9	744	184.8	173.9
5	10:58	68	55.9	4.9	29.8	765	210.6	192.7
6	11:08	79	61.3	5.4	35.2	838	232.1	193.9
7	11:18	88	67.1	5.8	41.0	887	249.3	196.7
8	11:28	95	73.5	6.4	47.4	969	275.0	198.7
9	11:38	102	80.3	6.8	54.2	998	292.2	205.0
10	11:48	113	87.4	7.1	61.3	1007	305.1	212.1
11	11:58	120	95.0	7.6	68.9	1015	326.6	225.3

T_0 (Suhu lingkungan) = 26.1 $^{\circ}\text{C}$
 R (Koefisien Korelasi) = 0.939
 Daya Masak Standart = 200.1 Watt