

**LAMPIRAN A**  
**PERHITUNGAN PEMBUATAN LARUTAN SEDIAAN UJI DAN**  
**VOLUME PENYUNTIKANNYA**

Volume penyuntikan : 0,5 ml/ 20 g BB mencit

1. 5 mg/kg BB

Untuk mencit 20 g =  $\frac{20 \text{ g} \times 5 \text{ mg}}{1000 \text{ g}}$  = 0,1 mg/20 g BB

1000 g

Konsentrasi larutan = 0,1 mg/0,5 ml = 0,2 mg/ml

2. 10 mg/kg BB

Untuk mencit 20 g =  $\frac{20 \text{ g} \times 10 \text{ mg}}{1000 \text{ g}}$  = 0,2 mg/20 g BB

1000 g

Konsentrasi larutan = 0,2 mg/0,5 ml = 0,4 mg/ml

**PERHITUNGAN NILAI KONVERSI DOSIS**  
**ASAM MEFENAMAT PADA MENCIT**

Dosis Asam mefenamat = 500 mg/70 kg BB

Faktor konversi pada mencit = 0,0026

Berat rata-rata mencit dewasa = 20 g

Konversi dosis Asam mefenamat pada mencit

= 500 mg x 0,0026

= 1,3 mg/ 20 g BB mencit

Dosis Asam mefenamat per kg BB mencit :

$\frac{1,3 \text{ mg}}{20 \text{ g}} \times 1000 \text{ g} = 65 \text{ mg/kg BB}$

**LAMPIRAN B**  
**PERHITUNGAN % HAMBATAN NYERI SENYAWA UJI DAN**  
**SENYAWA PEMBANDING ASAM MEFENAMAT**

Rumus :

$$\% \text{ hambatan nyeri} = \frac{fk - fr}{fk} \times 100 \%$$

*fr* = frekuensi geliat rata-rata pada kelompok uji atau kelompok pembanding

*fk* = frekuensi geliat rata-rata pada kelompok kontrol

Perhitungan :

Senyawa Uji 3-amino-2-fenilkuinazolin-4(3H)-on

a. 5 mg/kg BB:

$$\begin{aligned} \% \text{ hambatan nyeri} &= \frac{176,5 - 120,67}{176,5} \times 100 \% \\ &= 31,63 \% \end{aligned}$$

b. 10 mg/kg BB:

$$\begin{aligned} \% \text{ hambatan nyeri} &= \frac{176,5 - 105,33}{176,5} \times 100 \% \\ &= 40,32 \% \end{aligned}$$

Senyawa Uji 3-benzilidenamino-2-fenilkuinazolin-4(3H)-on

a. 5 mg/kg BB:

$$\begin{aligned} \% \text{ hambatan nyeri} &= \frac{176,5 - 71,50}{176,5} \times 100 \% \\ &= 59,49 \% \end{aligned}$$

b. 10 mg/kg BB:

$$\begin{aligned} \% \text{ hambatan nyeri} &= \frac{176,5 - 51,17}{176,5} \times 100 \% \\ &= 71,01 \% \end{aligned}$$

Senyawa uji 3-(4-metilbenzilidenamino)-2-fenilkuinazolin-4(3H)-on

a. 5 mg/kg BB:

$$\begin{aligned} \% \text{ hambatan nyeri} &= \frac{176,5 - 50,67}{176,5} \times 100 \% \\ &= 71,29 \% \end{aligned}$$

b. 10 mg/kg BB:

$$\begin{aligned} \% \text{ hambatan nyeri} &= \frac{176,5 - 41,33}{176,5} \times 100 \% \\ &= 76,58 \% \end{aligned}$$

Senyawa uji 3-(4-metoksibenzilidenamino)-2-fenilkuinazolin-4(3H)-on

a. 5 mg/kg BB:

$$\begin{aligned} \% \text{ hambatan nyeri} &= \frac{176,5 - 80,43}{176,5} \times 100 \% \\ &= 54,48 \% \end{aligned}$$

b. 10 mg/kg BB:

$$\begin{aligned} \% \text{ hambatan nyeri} &= \frac{176,5 - 67,17}{176,5} \times 100 \% \\ &= 61,95 \% \end{aligned}$$

Senyawa uji 3-(4-hidroksibenzilidenamino)-2-fenilkuinazolin-4(3H)-on

a. 5 mg/kg BB:

$$\begin{aligned} \% \text{ hambatan nyeri} &= \frac{176,5 - 90,50}{176,5} \times 100 \% \\ &= 48,73 \% \end{aligned}$$

b. 10 mg/kg BB:

$$\begin{aligned} \% \text{ hambatan nyeri} &= \frac{176,5 - 86,83}{176,5} \times 100 \% \\ &= 50,80 \% \end{aligned}$$

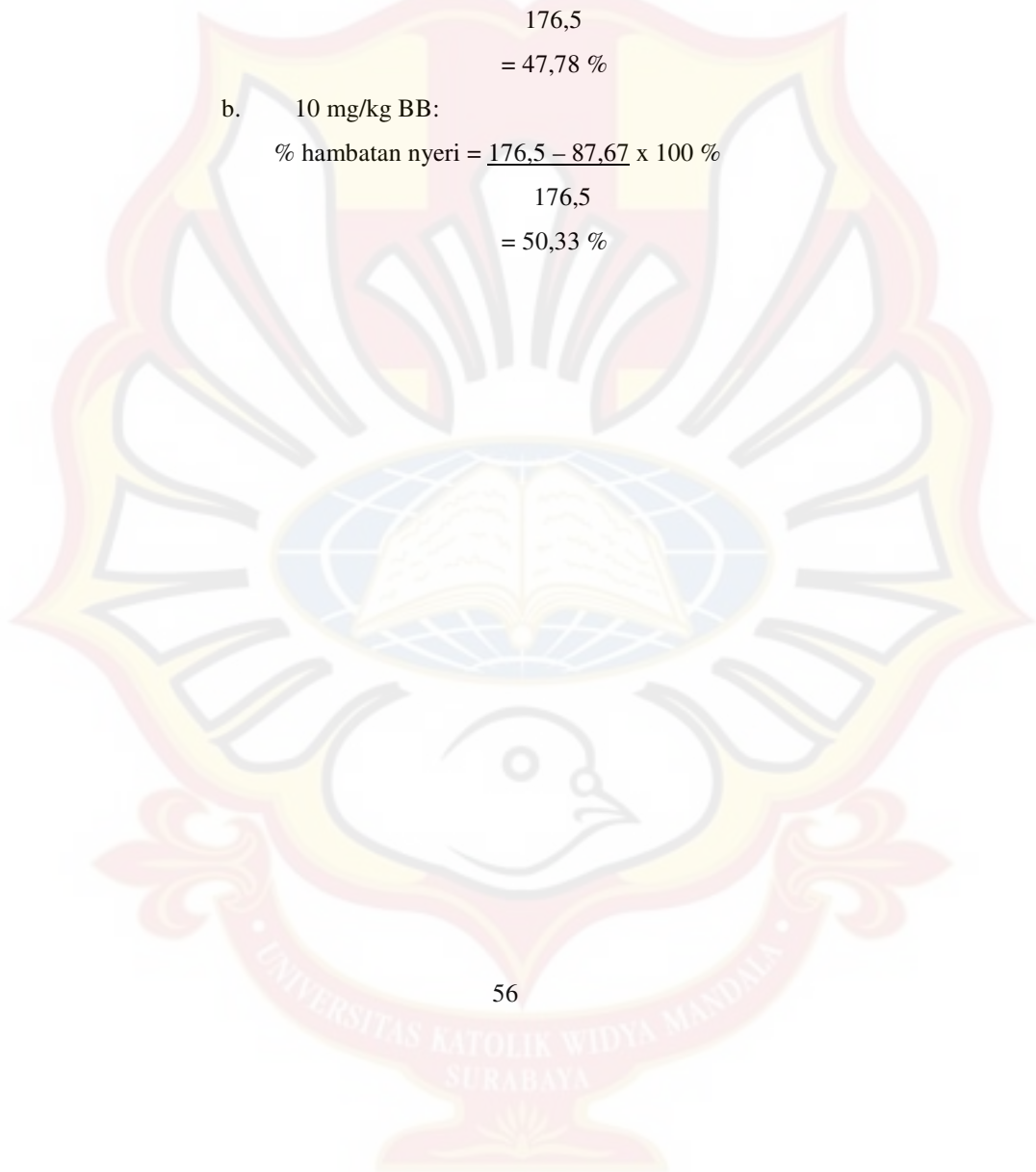
Senyawa Pembanding asam mefenamat

a. 5 mg/kg BB:

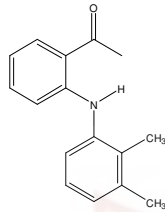
$$\begin{aligned} \% \text{ hambatan nyeri} &= \frac{176,5 - 92,17}{176,5} \times 100 \% \\ &= 47,78 \% \end{aligned}$$

b. 10 mg/kg BB:

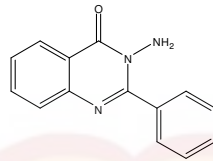
$$\begin{aligned} \% \text{ hambatan nyeri} &= \frac{176,5 - 87,67}{176,5} \times 100 \% \\ &= 50,33 \% \end{aligned}$$



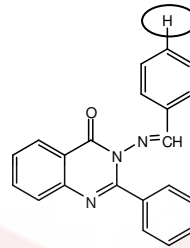
**LAMPIRAN C**  
**STRUKTUR SENYAWA UJI DAN NILAI LOG P**



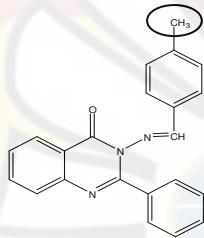
Log P: 4,03  
Asam Mefenamat  
(Senyawa P)



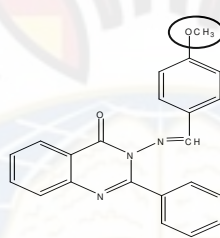
Log P: 2,63  
3-Amino-2-  
Fenilkuinazolin-4(3H)-  
On  
(Senyawa 1)



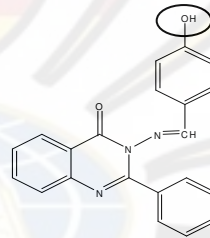
Log P: 5,3  
Benzilidenamino-2-  
Fenilkuinazolin-4(3H)-  
On  
(Senyawa 2)



Log P: 5,78  
3-(4-metilbenziliden-  
amino)-2-  
fenilkuinazolin-  
4(3H)-on  
(Senyawa 3)



Log P: 5,17  
3-(4-  
metoksibenzilidenamino)-  
2-fenilkuinazolin-4(3H)-  
on  
(Senyawa 4)



Log P: 4,91  
3-(4-  
hidroksibenziliden-  
amino)-2-  
fenilkuinazolin-  
4(3H)-on  
(Senyawa 5)

**LAMPIRAN D**  
**HASIL PERHITUNGAN HARGA RF DARI KLT SENYAWA UJI**

**TABEL HARGA RF SENYAWA UJI**

Senyawa uji	No. Replikasi	(Klo:Aseton)		(Klo:Etil)		(Heksan:Etil)	
		Harga Rf	Jmlh Noda	Harga Rf	Jmlh Noda	Harga Rf	Jmlh Noda
	1	0,58	1	0,54	1	0,34	1
Senyawa 1	2	0,56	1	0,54	1	0,34	1
	3	0,58	1	0,58	1	0,30	1
	1	0,60	1	0,56	1	0,36	1
Senyawa 2	2	0,58	1	0,56	1	0,34	1
	3	0,58	1	0,58	1	0,32	1
	1	0,54	1	0,52	1	0,38	1
Senyawa 3	2	0,50	1	0,52	1	0,42	1
	3	0,48	1	0,40	1	0,38	1
	1	0,58	1	0,54	1	0,30	1
Senyawa 4	2	0,56	1	0,54	1	0,30	1
	3	0,58	1	0,56	1	0,26	1
	1	0,48	1	0,44	1	0,20	1
Senyawa 5	2	0,46	1	0,44	1	0,18	1
	3	0,46	1	0,44	1	0,14	1



Keterangan:

Senyawa 1: 3-amino-2-fenilkuinazolin-4(3H)-on

Senyawa 2: 3-benzilidenamino-2-fenilkuinazolin-4(3H)-on

Senyawa 3: 3-(4-metilbenzilidenamino)-2-fenilkuinazolin-4(3H)-on

Senyawa 4: 3-(4-metoksibenzilidenamino)-2-fenilkuinazolin-4(3H)-on

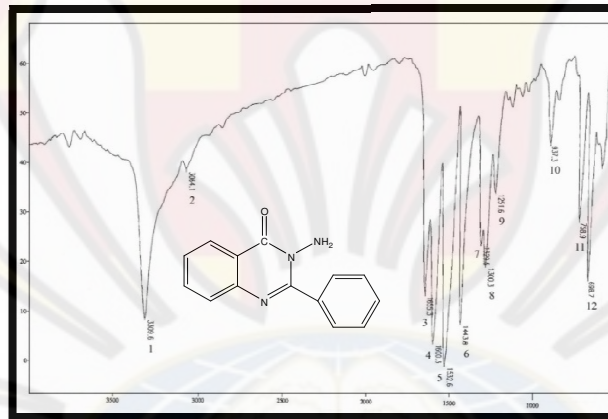
Senyawa 5: 3-(4-hidroksibenzilidenamino)-2-fenilkuinazolin-4(3H)-on

Fase Gerak I : kloroform:aseton (7:3)

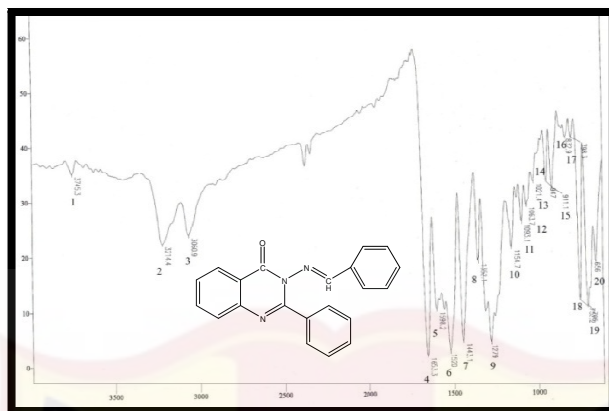
Fase Gerak II : kloroform:etil asetat (5:5)

Fase Gerak III : heksan:etil asetat (5:4)

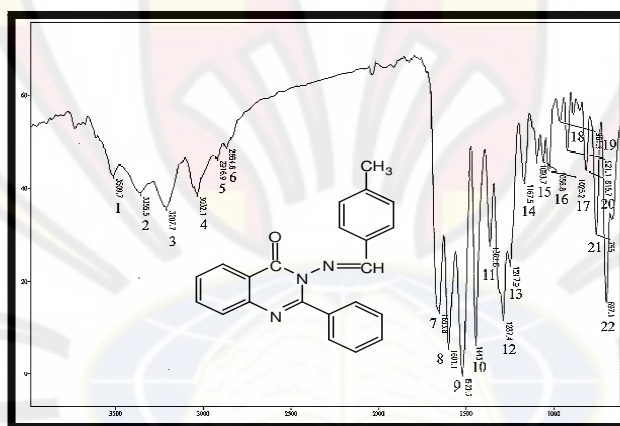
### KARAKTERISTIK DAN TABEL SPEKTROFOTOMETER INFRAMERAH DARI PENELITIAN TERDAHULU



**Gambar 4.1.** Spektrum inframerah 3-amino-2-fenilkuinazolin-4(3H)-on dengan metode pelet KBr.

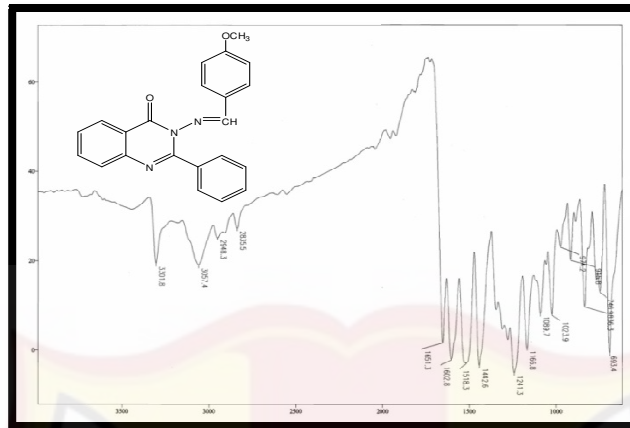


**Gambar 4.2.** Spektrum inframerah 3-benzilidenamino-2-fenilkuinazolin-4(3*H*)-on dengan metode pelet KBr.

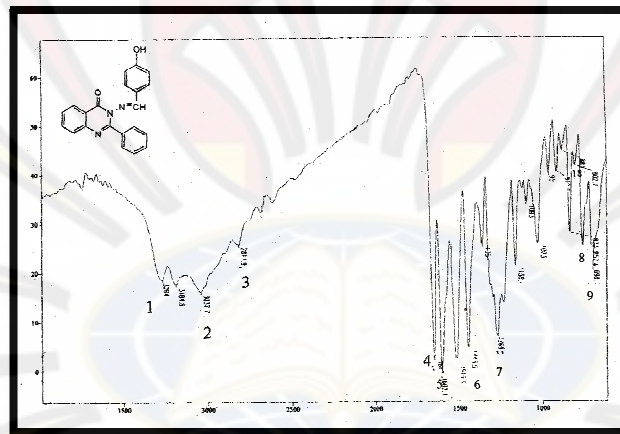


**Gambar 4.3.** Spektrum inframerah 3-(4-metilbenzilidenamino)-2-fenilkuinazolin-4(3*H*)-on dengan metode pelet KBr.





**Gambar 4.4.** Spektrum Inframerah 3-(4-metoksibenzilidenamino)-2-fenilkuinazolin-4(3*H*)-on dengan metode pelet KBr.



**Gambar 4.5.** Spektrum Inframerah senyawa 3-(4-hidroksibenzilidenamino)-2-fenilkuinazolin-4(3*H*)-on dengan metode pelet KBr.

**LAMPIRAN E**  
**DATA HASIL PENGAMATAN PENELITIAN**

**TABEL UJI HSD ANTARA KELOMPOK SENYAWA UJI,  
SENYAWA PEMBANDING ASAM MEFENAMAT DAN KONTROL  
CMC-NA 0,5%**

**POST HOC TESTS**

**MULTIPLE COMPARISONS**

FREKUENSI GELIAT  
TUKEY HSD

(I) Dosis Senyawa Uji (mg/kg bb)	(J) Dosis Senyawa Uji (mg/kg bb)	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
0	1.05	105.000*	2.278	.000	97.17	112.83
	1.1	125.333*	2.278	.000	117.50	133.17
	2.05	55.833*	2.278	.000	48.00	63.67
	2.1	71.167*	2.278	.000	63.33	79.00
	3.05	125.833*	2.278	.000	118.00	133.67
	3.1	135.167*	2.278	.000	127.33	143.00
	4.05	96.167*	2.278	.000	88.33	104.00
	4.1	109.333*	2.278	.000	101.50	117.17
	5.05	86.000*	2.278	.000	78.17	93.83
	5.1	89.667*	2.278	.000	81.83	97.50
1.05	6.05	84.333*	2.278	.000	76.50	92.17
	6.1	88.833*	2.278	.000	81.00	96.67
	0	-105.000*	2.278	.000	-112.83	-97.17
	1.1	20.333*	2.278	.000	12.50	28.17
	2.05	-49.167*	2.278	.000	-57.00	-41.33

	2.1	-33.833*	2.278	.000	-41.67	-26.00
	3.05	20.833*	2.278	.000	13.00	28.67
	3.1	30.167*	2.278	.000	22.33	38.00
	4.05	-8.833*	2.278	.014	-16.67	-1.00
	4.1	4.333	2.278	.788	-3.50	12.17
	5.05	-19.000*	2.278	.000	-26.83	-11.17
	5.1	-15.333*	2.278	.000	-23.17	-7.50
	6.05	-20.667*	2.278	.000	-28.50	-12.83
	6.1	-16.167*	2.278	.000	-24.00	-8.33
1.1	0	-125.333*	2.278	.000	-133.17	-117.50
	1.05	-20.333*	2.278	.000	-28.17	-12.50
	2.05	-69.500*	2.278	.000	-77.33	-61.67
	2.1	-54.167*	2.278	.000	-62.00	-46.33
	3.05	.500	2.278	1.000	-7.33	8.33
	3.1	9.833*	2.278	.003	2.00	17.67
	4.05	-29.167*	2.278	.000	-37.00	-21.33
	4.1	-16.000*	2.278	.000	-23.83	-8.17
	5.05	-39.333*	2.278	.000	-47.17	-31.50
	5.1	-35.667*	2.278	.000	-43.50	-27.83
	6.05	-41.000*	2.278	.000	-48.83	-33.17
	6.1	-36.500*	2.278	.000	-44.33	-28.67
2.05	0	-55.833*	2.278	.000	-63.67	-48.00
	1.05	49.167*	2.278	.000	41.33	57.00
	1.1	69.500*	2.278	.000	61.67	77.33
	2.1	15.333*	2.278	.000	7.50	23.17
	3.05	70.000*	2.278	.000	62.17	77.83
	3.1	79.333*	2.278	.000	71.50	87.17
	4.05	40.333*	2.278	.000	32.50	48.17
	4.1	53.500*	2.278	.000	45.67	61.33
	5.05	30.167*	2.278	.000	22.33	38.00

	5.1	33.833*	2.278	.000	26.00	41.67
	6.05	28.500*	2.278	.000	20.67	36.33
	6.1	33.000*	2.278	.000	25.17	40.83
2.1	0	-71.167*	2.278	.000	-79.00	-63.33
	1.05	33.833*	2.278	.000	26.00	41.67
	1.1	54.167*	2.278	.000	46.33	62.00
	2.05	-15.333*	2.278	.000	-23.17	-7.50
	3.05	54.667*	2.278	.000	46.83	62.50
	3.1	64.000*	2.278	.000	56.17	71.83
	4.05	25.000*	2.278	.000	17.17	32.83
	4.1	38.167*	2.278	.000	30.33	46.00
	5.05	14.833*	2.278	.000	7.00	22.67
	5.1	18.500*	2.278	.000	10.67	26.33
	6.05	13.167*	2.278	.000	5.33	21.00
	6.1	17.667*	2.278	.000	9.83	25.50
3.05	0	-125.833*	2.278	.000	-133.67	-118.00
	1.05	-20.833*	2.278	.000	-28.67	-13.00
	1.1	-500	2.278	1.000	-8.33	7.33
	2.05	-70.000*	2.278	.000	-77.83	-62.17
	2.1	-54.667*	2.278	.000	-62.50	-46.83
	3.1	9.333*	2.278	.007	1.50	17.17
	4.05	-29.667*	2.278	.000	-37.50	-21.83
	4.1	-16.500*	2.278	.000	-24.33	-8.67
	5.05	-39.833*	2.278	.000	-47.67	-32.00
	5.1	-36.167*	2.278	.000	-44.00	-28.33
	6.05	-41.500*	2.278	.000	-49.33	-33.67
	6.1	-37.000*	2.278	.000	-44.83	-29.17
3.1	0	-135.167*	2.278	.000	-143.00	-127.33
	1.05	-30.167*	2.278	.000	-38.00	-22.33
	1.1	-9.833*	2.278	.003	-17.67	-2.00

	2.05	-79.333*	2.278	.000	-87.17	-71.50
	2.1	-64.000*	2.278	.000	-71.83	-56.17
	3.05	-9.333*	2.278	.007	-17.17	-1.50
	4.05	-39.000*	2.278	.000	-46.83	-31.17
	4.1	-25.833*	2.278	.000	-33.67	-18.00
	5.05	-49.167*	2.278	.000	-57.00	-41.33
	5.1	-45.500*	2.278	.000	-53.33	-37.67
	6.05	-50.833*	2.278	.000	-58.67	-43.00
	6.1	-46.333*	2.278	.000	-54.17	-38.50
4.05	0	-96.167*	2.278	.000	-104.00	-88.33
	1.05	8.833*	2.278	.014	1.00	16.67
	1.1	29.167*	2.278	.000	21.33	37.00
	2.05	-40.333*	2.278	.000	-48.17	-32.50
	2.1	-25.000*	2.278	.000	-32.83	-17.17
	3.05	29.667*	2.278	.000	21.83	37.50
	3.1	39.000*	2.278	.000	31.17	46.83
	4.1	13.167*	2.278	.000	5.33	21.00
	5.05	-10.167*	2.278	.002	-18.00	-2.33
	5.1	-6.500	2.278	.204	-14.33	1.33
	6.05	-11.833*	2.278	.000	-19.67	-4.00
	6.1	-7.333	2.278	.088	-15.17	.50
4.1	0	-109.333*	2.278	.000	-117.17	-101.50
	1.05	-4.333	2.278	.788	-12.17	3.50
	1.1	16.000*	2.278	.000	8.17	23.83
	2.05	-53.500*	2.278	.000	-61.33	-45.67
	2.1	-38.167*	2.278	.000	-46.00	-30.33
	3.05	16.500*	2.278	.000	8.67	24.33
	3.1	25.833*	2.278	.000	18.00	33.67
	4.05	-13.167*	2.278	.000	-21.00	-5.33
	5.05	-23.333*	2.278	.000	-31.17	-15.50



	5.1	-19.667*	2.278	.000	-27.50	-11.83
	6.05	-25.000*	2.278	.000	-32.83	-17.17
	6.1	-20.500*	2.278	.000	-28.33	-12.67
5.05	0	-86.000*	2.278	.000	-93.83	-78.17
	1.05	19.000*	2.278	.000	11.17	26.83
	1.1	39.333*	2.278	.000	31.50	47.17
	2.05	-30.167*	2.278	.000	-38.00	-22.33
	2.1	-14.833*	2.278	.000	-22.67	-7.00
	3.05	39.833*	2.278	.000	32.00	47.67
	3.1	49.167*	2.278	.000	41.33	57.00
	4.05	10.167*	2.278	.002	2.33	18.00
	4.1	23.333*	2.278	.000	15.50	31.17
	5.1	3.667	2.278	.920	-4.17	11.50
	6.05	-1.667	2.278	1.000	-9.50	6.17
	6.1	2.833	2.278	.989	-5.00	10.67
5.1	0	-89.667*	2.278	.000	-97.50	-81.83
	1.05	15.333*	2.278	.000	7.50	23.17
	1.1	35.667*	2.278	.000	27.83	43.50
	2.05	-33.833*	2.278	.000	-41.67	-26.00
	2.1	-18.500*	2.278	.000	-26.33	-10.67
	3.05	36.167*	2.278	.000	28.33	44.00
	3.1	45.500*	2.278	.000	37.67	53.33
	4.05	6.500	2.278	.204	-1.33	14.33
	4.1	19.667*	2.278	.000	11.83	27.50
	5.05	-3.667	2.278	.920	-11.50	4.17
	6.05	-5.333	2.278	.497	-13.17	2.50
	6.1	-.833	2.278	1.000	-8.67	7.00
6.05	0	-84.333*	2.278	.000	-92.17	-76.50
	1.05	20.667*	2.278	.000	12.83	28.50
	1.1	41.000*	2.278	.000	33.17	48.83



	2.05	-28.500*	2.278	.000	-36.33	-20.67
	2.1	-13.167*	2.278	.000	-21.00	-5.33
	3.05	41.500*	2.278	.000	33.67	49.33
	3.1	50.833*	2.278	.000	43.00	58.67
	4.05	11.833*	2.278	.000	4.00	19.67
	4.1	25.000*	2.278	.000	17.17	32.83
	5.05	1.667	2.278	1.000	-6.17	9.50
	5.1	5.333	2.278	.497	-2.50	13.17
	6.1	4.500	2.278	.744	-3.33	12.33
6.1	0	-88.833*	2.278	.000	-96.67	-81.00
	1.05	16.167*	2.278	.000	8.33	24.00
	1.1	36.500*	2.278	.000	28.67	44.33
	2.05	-33.000*	2.278	.000	-40.83	-25.17
	2.1	-17.667*	2.278	.000	-25.50	-9.83
	3.05	37.000*	2.278	.000	29.17	44.83
	3.1	46.333*	2.278	.000	38.50	54.17
	4.05	7.333	2.278	.088	-.50	15.17
	4.1	20.500*	2.278	.000	12.67	28.33
	5.05	-2.833	2.278	.989	-10.67	5.00
	5.1	.833	2.278	1.000	-7.00	8.67
	6.05	-4.500	2.278	.744	-12.33	3.33

\*. The mean difference is significant at the 0.05 level.