

รายการอ้างอิง

ภาษาไทย

ณัฐกานต์ เกษประทุม. **พฤติกรรมกรรมการถ่ายเทความร้อนของผนังอาคารที่มีมวลสารมาก.**

วิทยานิพนธ์ปริญญาโทมหาบัณฑิต คณะสถาปัตยกรรมศาสตร์ บัณฑิตวิทยาลัย
จุฬาลงกรณ์มหาวิทยาลัย, 2543.

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ภาคผนวก ก

ศูนย์วิทยทรัพยากร
จุฬาลงกรณ์มหาวิทยาลัย

Group D										Group E										Group F										Group G									
п.а.	п.в.	п.г.	п.д.	п.е.	п.ж.	п.з.	п.и.	п.к.	п.л.	п.а.	п.в.	п.г.	п.д.	п.е.	п.ж.	п.з.	п.и.	п.к.	п.л.	п.а.	п.в.	п.г.	п.д.	п.е.	п.ж.	п.з.	п.и.	п.к.	п.л.	п.а.	п.в.	п.г.	п.д.	п.е.	п.ж.	п.з.	п.и.	п.к.	п.л.
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.4	0.5	0.6	0.6	0.7	0.7	0.6	0.5	0.5	0.4	0.5	0.6	0.7	0.6	0.7	0.7	0.6	0.6	0.5	0.5	0.5	0.6	0.7	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.8	0.8	0.9	0.9	0.8	0.8	0.8	0.7
1.3	1.5	1.6	1.7	2.0	2.0	1.9	1.6	1.6	1.4	1.5	1.7	2.0	1.9	2.2	2.1	2.1	1.8	1.7	1.6	1.6	1.7	2.0	2.0	2.3	2.2	2.2	2.2	2.0	1.9	1.7	1.8	2.3	2.3	2.7	2.6	2.5	2.3	2.2	2.0
2.2	2.5	3.0	2.9	3.4	3.3	3.2	2.7	2.6	2.3	2.5	2.8	3.3	3.2	3.6	3.5	3.4	3.0	2.9	2.6	2.6	2.9	3.4	3.3	3.9	3.7	3.6	3.3	3.1	2.8	2.9	3.0	3.8	3.9	4.5	4.3	4.2	3.8	3.7	3.3
3.1	3.5	4.2	4.1	4.8	4.6	4.5	3.8	3.6	3.2	3.5	3.9	4.6	4.4	5.1	4.9	4.8	4.3	4.1	3.6	3.7	4.0	4.7	4.6	5.5	5.2	5.1	4.6	4.4	4.0	4.0	4.3	5.3	5.5	6.2	6.0	5.9	5.3	5.2	4.6
4.0	4.5	5.4	5.2	6.1	5.9	5.7	4.9	4.7	4.1	4.5	5.0	5.9	5.7	6.5	6.3	6.2	5.5	5.2	4.7	4.7	5.2	6.1	6.0	7.0	6.7	6.5	5.9	5.6	5.1	5.2	5.5	6.8	7.0	8.0	7.8	7.6	6.6	6.6	6.0
4.9	5.5	6.6	6.4	7.5	7.2	7.0	6.0	5.7	5.1	5.5	6.1	7.2	7.0	8.0	7.7	7.5	6.7	6.4	5.7	5.8	6.4	7.4	7.3	8.6	8.2	8.0	7.2	6.9	6.3	6.3	6.7	8.3	8.6	9.8	9.5	9.3	8.3	8.1	7.3
5.8	6.5	7.8	7.5	8.8	8.5	8.3	7.1	6.8	6.0	6.4	7.3	8.5	8.2	9.4	9.1	8.9	7.9	7.6	6.2	6.8	7.5	8.8	8.6	10.2	9.7	9.4	8.6	8.1	7.4	7.5	7.9	9.9	10.1	11.6	11.2	11.0	9.8	9.6	8.6
6.7	7.5	9.0	8.7	10.2	9.8	9.6	8.2	7.8	6.9	7.4	8.4	9.8	9.5	10.9	10.5	10.3	9.1	8.7	7.2	7.9	8.7	10.1	10.0	11.7	11.2	10.9	9.9	9.4	8.5	8.6	9.1	11.4	11.7	13.4	12.9	12.7	11.3	11.0	10.0
7.6	8.5	10.2	9.9	11.5	11.1	10.9	9.3	8.9	7.8	8.4	9.5	11.1	10.8	12.3	11.9	11.6	10.3	9.9	8.1	8.9	9.8	11.5	11.3	13.3	12.7	12.3	11.2	10.7	9.7	9.8	10.4	12.9	13.3	15.2	14.7	14.4	12.9	12.5	11.3
8.5	9.5	11.4	11.0	12.9	12.4	12.1	10.4	9.9	8.7	9.4	10.6	12.4	12.0	13.8	13.3	13.0	11.5	11.0	9.9	10.0	11.0	12.8	12.6	14.8	14.2	13.8	12.5	11.9	10.8	10.9	11.6	14.4	14.8	17.0	16.4	16.1	14.4	14.0	12.6
9.4	10.5	12.6	12.2	14.3	13.7	13.4	11.5	10.9	9.7	10.4	11.7	13.7	13.3	15.2	14.7	14.4	12.8	12.2	10.9	11.0	12.1	14.2	13.9	16.4	15.7	15.2	13.8	13.2	12.0	12.0	12.8	15.9	16.4	18.7	18.1	17.8	15.9	15.5	13.9
10.3	11.5	13.8	13.3	15.6	15.0	14.7	12.6	12.0	10.6	11.4	12.8	15.0	14.6	16.6	16.1	15.8	14.0	13.4	12.0	12.1	13.3	15.5	15.3	18.0	17.2	16.7	15.1	14.4	13.1	13.4	14.0	17.4	18.0	20.5	19.9	19.5	17.4	16.9	15.3
11.2	12.5	15.0	14.5	17.0	16.3	16.0	13.7	13.0	11.5	12.4	14.0	16.3	15.8	18.1	17.5	17.1	15.2	14.5	13.0	13.1	14.5	16.9	16.6	19.5	18.7	18.1	16.5	15.7	14.2	14.4	15.2	19.0	19.5	22.3	21.6	21.2	18.9	18.4	16.6
13.9	15.5	18.6	18.0	21.0	20.2	19.8	17.0	16.2	14.3	14.4	16.2	18.9	18.4	21.0	20.3	19.9	17.6	16.9	15.1	14.2	15.6	18.2	17.9	21.1	20.2	19.6	17.8	16.9	15.4	16.7	17.7	22.0	22.6	25.9	25.0	24.6	21.9	21.4	19.3
14.8	16.5	19.8	19.1	22.4	21.5	21.1	18.1	17.2	15.2	15.4	17.3	20.2	19.6	22.4	21.7	21.2	18.8	18.0	16.1	15.2	16.3	19.0	18.7	21.9	20.6	20.2	18.4	17.7	16.1	17.9	18.9	23.5	24.2	27.7	26.8	26.3	23.4	22.8	20.6
15.7	17.5	21.0	20.3	23.8	22.8	22.3	19.2	18.2	16.1	16.4	18.4	21.6	20.9	23.9	23.1	22.6	20.0	19.2	17.2	16.2	17.3	19.1	22.3	23.6	23.2	21.7	21.0	19.1	18.2	20.2	21.3	26.5	27.3	31.2	30.2	29.7	26.5	25.8	23.2
16.6	18.5	22.2	21.4	25.1	24.1	23.6	20.3	19.3	17.0	17.4	19.5	22.9	22.2	25.3	24.5	24.0	21.3	20.3	18.2	17.2	18.4	20.2	23.6	23.2	21.7	21.7	20.7	18.8	22.0	23.2	28.2	29.0	33.0	31.9	31.4	28.0	27.3	24.6	
17.5	19.5	23.3	22.6	26.5	25.4	24.9	21.4	20.3	17.9	18.4	20.7	24.2	23.4	26.8	25.9	25.3	22.5	21.5	19.2	18.2	19.4	21.4	25.0	24.6	22.9	22.7	21.9	19.9	24.4	25.8	30.9	31.7	35.8	34.8	34.3	31.4	30.7	27.6	
18.4	20.5	24.5	23.8	27.8	26.7	26.2	22.4	21.4	18.9	19.3	21.8	25.5	24.7	28.2	27.3	26.7	23.7	22.7	20.3	18.6	20.5	22.5	26.3	25.9	24.2	24.2	23.2	21.8	26.2	27.8	33.0	33.8	38.1	37.1	36.6	33.7	33.1	30.2	
19.3	21.5	25.7	24.9	29.2	28.0	27.4	23.5	22.4	19.8	20.3	22.9	26.8	26.0	29.7	28.7	28.1	24.9	23.8	21.3	19.6	21.5	23.7	27.2	26.7	25.0	25.0	23.9	22.6	28.4	29.9	35.8	36.6	40.9	40.0	39.5	36.6	36.0	33.1	
20.2	22.5	26.9	26.1	30.5	29.3	28.7	24.6	23.5	20.7	21.3	24.0	28.1	27.2	31.1	30.1	29.4	26.1	25.0	22.4	20.5	22.6	24.9	28.6	28.3	26.6	26.6	25.6	24.2	30.2	31.7	37.6	38.4	42.5	41.6	41.1	38.2	37.5	34.6	
21.1	23.5	28.1	27.2	31.9	30.6	30.0	25.7	24.5	21.6	22.3	25.1	29.4	28.5	32.6	31.5	30.8	27.3	26.2	23.4	22.1	23.6	26.0	30.4	29.9	28.2	28.2	26.6	25.2	31.4	32.9	38.8	39.6	43.7	42.8	42.3	39.5	38.8	35.9	
22.0	24.5	29.3	28.4	33.3	32.0	31.3	26.8	25.5	22.5	23.3	26.2	30.7	29.8	34.0	32.9	32.2	28.6	27.3	24.4	23.1	24.7	27.2	31.7	31.2	29.5	29.5	27.9	26.8	32.5	34.0	40.7	41.5	45.6	44.7	44.2	41.4	40.7	37.7	
22.9	25.5	30.5	29.6	34.6	33.3	32.6	27.9	26.6	23.5	24.3	27.4	32.0	31.0	35.5	34.3	33.6	29.8	28.5	25.3	24.1	25.7	28.3	33.1	32.5	30.8	30.8	29.2	28.1	33.6	35.1	41.6	42.4	46.5	45.6	45.1	42.3	41.6	38.7	
23.8	26.5	31.7	30.7	36.0	34.6	33.8	29.0	27.6	24.4	25.3	28.5	33.3	32.3	36.9	35.7	34.9	31.0	29.6	26.5	24.3	26.8	29.5	34.4	33.9	32.2	32.2	30.6	29.5	35.2	36.7	43.1	43.9	48.0	47.1	46.6	43.8	43.1	40.2	
24.7	27.5	32.9	31.9	37.3	35.9	35.1	30.1	28.7	25.3	26.3	29.6	34.6	33.6	38.4	37.0	36.3	32.2	30.8	27.6	25.3	27.8	30.6	35.6	35.2	34.4	33.7	32.5	31.4	36.4	37.9	44.0	44.8	48.9	48.0	47.5	44.7	44.0	41.1	
										27.3	30.7	35.9	34.8	39.8	38.4	37.7	33.4	32.0	28.6	27.0	28.9	31.8	37.1	36.5	35.0	34.3	33.3	32.3	38.4	39.9	45.1	45.9	49.9	49.1	48.6	45.8	45.1	42.2	

П

U	Group A										Group B										Group C												
	М.А.	П.А.	Ш.А.	Ы.А.	Э.А.	Н.А.	Ж.А.	Т.А.	Л.А.	К.А.	М.Б.	П.Б.	Ш.Б.	Ы.Б.	Э.Б.	Н.Б.	Ж.Б.	Т.Б.	Л.Б.	К.Б.	М.С.	П.С.	Ш.С.	Ы.С.	Э.С.	Н.С.	Ж.С.	Т.С.	Л.С.	К.С.			
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
0.0	0.5	0.5	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6			
0.1	1.5	1.6	1.8	1.7	1.7	1.6	1.6	1.6	1.5	1.4	1.4	1.5	1.6	1.7	1.9	1.8	1.9	1.7	1.7	1.7	1.7	1.6	1.6	1.5	1.6	1.8	2.0	2.2	2.1	2.0	2.0		
0.1	2.4	2.7	3.0	2.8	2.9	2.7	2.7	2.6	2.5	2.4	2.3	2.5	2.6	2.9	3.2	3.0	3.1	2.9	2.9	2.8	2.7	2.6	2.5	2.7	3.1	3.4	3.7	3.5	3.3	3.3	3.2		
0.1	3.4	3.8	4.2	3.9	4.1	3.7	3.8	3.7	3.5	3.4	3.2	3.5	3.7	4.1	4.5	4.2	4.3	4.0	4.0	4.0	3.8	3.6	3.5	3.8	4.3	4.7	5.1	4.9	4.6	4.7	4.5		
0.2	4.4	4.9	5.4	5.0	5.2	4.8	4.8	4.7	4.5	4.3	4.2	4.5	4.8	5.2	5.7	5.4	5.6	5.1	5.2	5.1	4.9	4.7	4.5	4.9	5.5	6.1	6.6	6.2	6.3	5.9	6.0	5.8	
0.2	5.4	5.9	6.6	6.2	6.4	5.9	5.9	5.8	5.6	5.3	5.1	5.5	5.8	6.4	7.0	6.6	6.8	6.3	6.4	6.2	6.0	5.7	5.5	6.0	6.8	7.4	8.1	7.6	7.7	7.2	7.3	7.1	
0.3	6.4	7.0	7.8	7.3	7.5	6.9	7.0	6.9	6.6	6.2	6.0	6.5	6.9	7.5	8.3	7.8	8.0	7.4	7.5	7.4	7.1	6.8	6.5	7.1	8.0	8.8	9.5	9.0	9.1	8.5	8.6	8.7	8.4
0.3	7.3	8.1	9.0	8.4	8.7	8.0	8.1	7.9	7.6	7.2	6.9	7.5	7.9	8.7	9.6	9.0	9.3	8.6	8.7	8.5	8.2	7.8	7.5	8.1	9.2	10.1	11.0	10.4	10.6	9.8	10.0	10.0	9.7
0.3	8.3	9.2	10.2	9.5	9.8	9.0	9.2	9.0	8.6	8.2	7.9	8.5	9.0	9.9	10.9	10.2	10.5	9.7	9.8	9.6	9.3	8.8	8.6	9.2	10.5	11.5	12.5	11.8	12.0	11.2	11.3	11.0	10.5
0.4	9.3	10.3	11.4	10.6	11.0	10.1	10.2	10.0	9.6	9.1	8.8	9.6	10.1	11.0	12.1	11.4	11.8	10.9	11.0	10.8	10.4	9.9	9.6	10.3	11.7	12.8	13.9	13.2	13.4	12.5	12.6	12.7	12.3
0.4	10.3	11.3	12.6	11.8	12.2	11.2	11.3	11.1	10.6	10.1	9.7	10.6	11.1	12.2	13.4	12.6	13.0	12.0	12.1	11.9	11.5	10.9	10.6	11.4	12.9	14.2	15.4	14.6	14.8	13.8	14.0	14.0	13.6
0.5	11.3	12.4	13.8	12.9	13.3	12.2	12.4	12.1	11.6	11.0	10.7	11.6	12.2	13.3	14.7	13.8	14.2	13.2	13.3	13.1	12.5	12.0	11.6	12.5	14.2	15.5	16.9	16.0	16.2	15.1	15.3	15.4	14.8
0.5	12.2	13.5	15.0	14.0	14.5	13.3	13.5	13.2	12.6	12.0	11.6	12.6	13.2	14.5	16.0	15.0	15.5	14.3	14.5	14.2	13.6	13.0	12.6	13.6	15.4	16.9	18.3	17.3	17.6	16.4	16.6	16.7	16.1
0.5	13.2	14.6	16.2	15.1	15.6	14.4	14.5	14.2	13.6	13.0	12.5	13.6	14.3	15.7	17.2	16.2	16.7	15.4	15.6	15.3	14.7	14.0	13.6	14.7	16.6	18.2	19.8	18.7	19.0	17.7	17.9	18.0	17.4
0.6	14.2	15.7	17.4	16.3	16.8	15.4	15.6	15.3	14.7	13.9	13.4	14.6	15.4	16.8	18.5	17.4	17.9	16.6	16.8	16.5	15.8	15.1	14.6	15.7	17.9	19.6	21.3	20.1	20.4	19.0	19.3	19.4	18.7
0.6	15.2	16.7	18.6	17.4	17.9	16.5	16.7	16.4	15.7	14.9	14.4	15.6	16.4	18.0	19.8	18.6	19.2	17.7	17.9	17.6	16.9	16.1	15.6	16.8	19.1	20.9	22.7	21.5	21.8	20.4	20.6	20.7	20.0
0.7	16.2	17.8	19.8	18.5	19.1	17.6	17.8	17.4	16.7	15.8	15.3	16.6	17.5	19.1	21.1	19.8	20.4	18.9	19.1	18.7	18.0	17.2	16.6	17.9	20.3	22.3	24.2	22.9	23.2	21.7	21.9	22.0	21.3
0.7	17.1	18.9	21.0	19.6	20.3	18.6	18.8	18.5	17.7	16.8	16.2	17.6	18.5	20.3	22.4	21.0	21.7	20.0	20.2	19.9	19.1	18.2	17.6	19.0	21.6	23.6	25.7	24.3	24.6	23.0	23.3	23.4	22.6
0.7	18.1	20.0	22.2	20.7	21.4	19.7	19.9	19.5	18.7	17.8	17.1	18.6	19.6	21.5	23.6	22.2	22.9	21.2	21.4	21.0	20.2	19.2	18.6	20.1	22.8	25.0	27.1	25.7	26.0	24.3	24.6	24.7	23.9
0.8	19.1	21.1	23.3	21.9	22.6	20.8	21.0	20.6	19.7	18.7	18.1	19.6	20.7	22.6	24.9	23.4	24.1	22.3	22.6	22.1	21.3	20.3	19.6	21.2	24.0	26.3	28.6	27.0	27.4	25.6	25.9	26.0	25.2
0.8	20.1	22.2	24.5	23.0	23.7	21.8	22.1	21.6	20.7	19.7	19.0	20.6	21.7	23.8	26.2	24.6	25.4	23.5	23.7	23.3	22.4	21.3	20.6	22.3	25.3	27.7	30.1	28.4	28.9	26.9	27.3	27.4	26.5
0.9	21.1	23.2	25.7	24.1	24.9	22.9	23.1	22.7	21.7	20.6	19.9	21.6	22.8	25.0	27.5	25.8	26.6	24.6	24.9	24.4	23.5	22.4	21.6	23.3	26.5	29.0	31.5	29.8	30.3	28.2	28.6	28.7	27.8
0.9	22.0	24.3	26.9	25.2	26.0	23.9	24.2	23.7	22.7	21.6	20.8	22.6	23.8	26.1	28.7	27.0	27.8	25.7	26.0	25.5	24.5	23.4	22.6	24.4	27.7	30.4	33.0	31.2	31.7	29.5	29.9	30.0	29.0
0.9	23.0	25.4	28.1	26.3	27.2	25.0	25.3	24.8	23.8	22.6	21.8	23.6	24.9	27.3	30.0	28.2	29.1	26.9	27.2	26.7	25.6	24.4	23.7	25.5	28.9	31.7	34.5	32.6	33.1	30.9	31.2	31.4	30.3
1.0	24.0	26.5	29.3	27.5	28.4	26.1	26.4	25.8	24.8	23.5	22.7	24.6	26.0	28.4	31.3	29.4	30.3	28.0	28.3	27.8	26.7	25.5	24.7	26.6	30.2	33.1	35.9	34.0	34.5	32.2	32.6	32.7	31.6
1.0	25.0	27.6	30.5	28.6	29.5	27.1	27.5	26.9	25.8	24.5	23.6	25.6	27.0	29.6	32.6	30.6	31.6	29.2	29.5	28.9	27.8	26.5	25.7	27.7	31.4	34.4	37.4	35.4	35.9	33.5	33.9	34.0	32.9
1.1	26.0	28.6	31.7	29.7	30.7	28.2	28.5	28.0	26.8	25.4	24.5	26.6	28.0	30.6	33.6	31.6	32.6	30.2	30.5	29.9	28.8	27.6	26.8	28.8	32.6	35.8	38.9	36.8	37.3	34.8	35.2	35.4	34.2
1.1	26.9	29.7	32.9	30.8	31.8	29.3	29.6	29.0	27.8	26.4	25.5	27.7	29.1	31.9	35.1	33.0	34.0	31.5	31.8	31.2	30.0	28.6	27.7	29.9	33.9	37.2	40.3	38.1	38.7	36.1	36.6	36.7	35.5

SE

	Group A					Group B					Group C									
	Մ.Բ.	Մ.Գ.	Ս.Բ.	Ս.Գ.	Ը.Գ.	Մ.Բ.	Մ.Գ.	Ս.Բ.	Ս.Գ.	Ը.Գ.	Մ.Բ.	Մ.Գ.	Ս.Բ.	Ս.Գ.	Ը.Գ.	Մ.Բ.	Մ.Գ.	Ս.Բ.	Ս.Գ.	Ը.Գ.
U	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.6	0.6	0.5	0.4	0.4	0.4	0.5	0.5	0.6	0.6	0.7	0.7	0.7	0.6	0.5	0.6	0.6	0.6	0.7
0.1	1.8	1.7	1.7	1.4	1.4	1.2	1.3	1.3	1.5	1.6	1.7	1.9	1.9	1.9	1.9	1.6	1.5	1.3	1.4	1.5
0.1	3.0	2.9	2.9	2.4	2.3	2.0	2.1	2.2	2.4	2.6	2.9	3.1	3.2	3.1	3.1	2.6	2.5	2.2	2.3	2.4
0.1	4.3	4.1	4.1	3.4	3.2	2.7	2.9	3.1	3.4	3.6	4.1	4.4	4.5	4.3	4.3	3.6	3.5	3.0	3.2	3.4
0.2	5.5	5.2	5.2	4.3	4.1	3.5	3.8	4.0	4.4	4.7	5.2	5.6	5.8	5.6	5.6	4.7	4.5	3.9	4.1	4.4
0.2	6.7	6.4	6.4	5.3	5.0	4.3	4.6	4.9	5.3	5.7	6.4	6.9	7.1	6.8	6.8	5.7	5.5	4.8	5.0	5.4
0.3	7.9	7.5	7.5	6.2	6.0	5.1	5.4	5.8	6.3	6.8	7.6	8.1	8.4	8.1	8.0	6.8	6.5	5.6	6.0	6.3
0.3	9.1	8.7	8.7	7.2	6.9	5.9	6.3	6.7	7.3	7.8	8.7	9.3	9.7	9.3	9.3	7.8	7.5	6.5	6.9	7.3
0.3	10.4	9.9	9.8	8.2	7.8	6.7	7.1	7.6	8.3	8.8	9.9	10.6	11.0	10.5	10.5	8.8	8.5	7.3	7.8	8.3
0.4	11.6	11.0	11.0	9.1	8.7	7.4	7.9	8.5	9.2	9.9	11.1	11.8	12.3	11.8	11.8	9.9	9.5	8.2	8.7	9.3
0.4	12.8	12.2	12.2	10.1	9.6	8.2	8.8	9.4	10.2	10.9	12.2	13.1	13.6	13.0	13.0	10.9	10.5	9.1	9.6	10.2
0.5	14.0	13.3	13.3	11.1	10.6	9.0	9.6	10.3	11.2	12.0	13.4	14.3	14.9	14.3	14.2	12.0	11.5	9.9	10.5	11.2
0.5	15.2	14.5	14.5	12.0	11.5	9.8	10.5	11.2	12.1	13.0	14.6	15.6	16.2	15.5	15.5	13.0	12.5	10.8	11.5	12.2
0.5	16.5	15.7	15.6	13.0	12.4	10.6	11.3	12.1	13.1	14.0	15.7	16.8	17.5	16.7	16.7	14.1	13.5	11.7	12.4	13.2
0.6	17.7	16.8	16.8	13.9	13.3	11.4	12.1	13.0	14.1	15.1	16.9	18.1	18.8	18.0	17.9	15.1	14.5	12.5	13.3	14.1
0.6	18.9	18.0	17.9	14.9	14.2	12.2	13.0	13.9	15.0	16.1	18.1	19.3	20.1	19.2	19.2	16.1	15.5	13.4	14.2	15.1
0.7	20.1	19.1	19.1	15.9	15.1	12.9	13.8	14.8	16.0	17.2	19.2	20.6	21.4	20.5	20.4	17.2	16.5	14.3	15.1	16.1
0.7	21.3	20.3	20.3	16.8	16.1	13.7	14.6	15.7	17.0	18.2	20.4	21.8	22.7	21.7	21.7	18.2	17.5	15.1	16.0	17.1
0.7	22.6	21.5	21.4	17.8	17.0	14.5	15.5	16.6	18.0	19.2	21.6	23.0	24.0	22.9	22.9	19.3	18.5	16.0	17.0	18.0
0.8	23.8	22.6	22.6	18.7	17.9	15.3	16.3	17.5	18.9	20.3	22.7	24.3	25.3	24.2	24.1	20.3	19.5	16.9	17.9	19.0
0.8	25.0	23.8	23.7	19.7	18.8	16.1	17.2	18.3	19.9	21.3	23.9	25.5	26.6	25.4	25.4	21.3	20.5	17.7	18.8	20.0
0.9	26.2	25.0	24.9	20.7	19.7	16.9	18.0	19.2	20.9	22.4	25.1	26.8	27.9	26.7	26.6	22.4	21.4	18.6	19.7	20.9
0.9	27.4	26.1	26.0	21.6	20.6	17.6	18.8	20.1	21.8	23.4	26.2	28.0	29.2	27.9	27.8	23.4	22.4	19.4	20.6	21.9
0.9	28.7	27.3	27.2	22.6	21.6	18.4	19.7	21.0	22.8	24.4	27.4	29.3	30.5	29.2	29.1	24.5	23.4	20.3	21.5	22.9
1.0	29.9	28.4	28.4	23.5	22.5	19.2	20.5	21.9	23.8	25.5	28.6	30.5	31.8	30.4	30.3	25.5	24.4	21.2	22.5	23.9
1.0	31.1	29.6	29.5	24.5	23.4	20.0	21.3	22.8	24.8	26.5	29.7	31.8	33.1	31.6	31.6	26.5	25.4	22.0	23.4	24.8
1.1	32.3	30.8	30.7	25.5	24.3	20.8	22.2	23.7	25.7	27.6	30.9	33.0	34.6	32.9	32.9	28.0	26.4	23.3	24.5	26.2
1.1	33.5	31.9	31.8	26.4	25.2	21.6	23.0	24.6	26.7	28.6	32.1	34.3	35.7	34.1	34.0	28.6	27.4	23.8	25.2	26.8

Group D				Group E				Group F				Group G			
н.п.	н.п.	н.п.	н.п.	н.п.	н.п.	н.п.	н.п.	н.п.	н.п.	н.п.	н.п.	н.п.	н.п.	н.п.	н.п.
00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
08	08	07	07	06	06	07	07	08	08	09	09	10	10	10	10
25	24	24	21	20	18	19	20	21	22	24	25	26	28	29	31
41	40	40	35	34	31	32	33	35	37	40	42	47	46	41	39
58	56	56	49	48	43	45	47	49	52	56	59	66	64	64	67
75	72	72	63	61	55	57	60	63	67	72	76	84	83	82	73
91	88	88	77	75	67	70	73	78	81	88	93	103	101	109	110
108	104	104	91	88	80	83	87	92	96	104	110	122	119	119	122
124	120	120	105	102	92	96	100	106	111	120	126	140	138	137	143
141	136	136	119	115	104	109	113	120	126	137	143	159	156	155	138
158	152	152	133	129	116	121	127	134	141	153	160	178	174	173	155
174	168	168	147	143	129	134	140	148	155	169	177	197	193	192	171
191	184	184	161	156	141	147	154	162	170	185	194	215	211	210	187
207	200	200	175	170	153	160	167	176	185	201	211	234	230	228	203
224	216	216	189	183	165	172	180	190	200	217	228	253	248	248	257
241	232	232	203	197	178	185	194	205	215	233	244	271	266	265	227
257	248	248	217	210	190	198	207	219	229	249	261	290	285	283	252
274	264	264	231	224	202	211	220	233	244	265	278	309	303	303	284
290	280	280	245	238	214	223	234	247	259	281	295	328	321	320	285
307	296	296	259	251	226	236	247	261	274	297	312	346	340	338	301
324	312	312	273	265	239	249	260	275	289	313	329	365	358	356	317
340	328	328	287	278	251	262	274	289	303	329	346	384	376	374	334
357	344	344	303	292	263	274	287	303	318	345	362	402	395	393	350
373	360	360	359	315	305	275	287	300	317	333	361	421	413	411	366
390	376	376	375	329	319	298	300	314	332	348	378	440	432	429	382
407	392	392	361	343	333	300	313	327	346	363	394	459	450	447	399
423	408	408	371	346	312	326	340	360	377	410	430	477	468	466	415
440	424	424	373	360	324	338	354	374	392	426	447	496	487	484	431
456	440	440	439	385	373	337	351	367	388	407	442	515	505	502	447

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U	Group A										Group B										Group C															
	Ա.Ք.	Ո.Պ.	Մ.Վ.	Ս.Է.	Մ.Ք.	Ռ.Է.	Ռ.Ք.	Ո.Է.	Տ.Ք.	Տ.Է.	Ա.Ք.	Ո.Պ.	Մ.Վ.	Ս.Է.	Մ.Ք.	Ռ.Է.	Ռ.Ք.	Ո.Է.	Տ.Ք.	Տ.Է.	Ա.Ք.	Ո.Պ.	Մ.Վ.	Ս.Է.	Մ.Ք.	Ռ.Է.	Ռ.Ք.	Ո.Է.	Տ.Ք.	Տ.Է.						
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
0.0	0.6	0.6	0.5	0.3	0.3	0.4	0.3	0.3	0.4	0.5	0.6	0.7	0.7	0.6	0.5	0.3	0.3	0.3	0.4	0.5	0.6	0.7	0.8	0.8	0.7	0.6	0.4	0.4	0.5	0.4	0.4	0.5	0.6	0.7	0.8	
0.1	1.9	1.7	1.4	0.9	0.9	1.2	0.8	0.8	1.1	1.6	1.9	2.0	2.0	1.7	1.4	1.0	1.0	1.2	0.8	0.9	1.2	1.6	1.9	2.1	2.3	2.0	1.7	1.3	1.3	1.5	1.1	1.1	1.4	1.9	2.2	2.4
0.1	3.2	2.8	2.3	1.5	1.5	2.0	1.3	1.3	1.9	2.6	3.1	3.4	3.3	2.8	2.4	1.6	1.6	2.1	1.3	1.5	2.0	2.7	3.2	3.5	3.8	3.3	2.9	2.1	2.1	2.6	1.8	1.9	2.4	3.2	3.7	4.0
0.1	4.5	3.9	3.2	2.1	2.1	2.7	1.8	1.9	2.7	3.6	4.4	4.8	4.6	3.9	3.3	2.3	2.2	2.9	1.9	2.1	2.8	3.8	4.5	4.8	5.3	4.6	4.0	3.0	2.9	3.6	2.6	2.7	3.4	4.4	5.2	5.5
0.2	5.8	5.0	4.1	2.7	2.7	3.5	2.3	2.4	3.4	4.7	5.6	6.1	5.9	5.1	4.3	2.9	2.9	3.7	2.4	2.6	3.6	4.9	5.7	6.2	6.8	6.0	5.2	3.8	3.8	4.6	3.3	3.4	4.3	5.7	6.6	7.1
0.2	7.1	6.2	5.0	3.3	3.3	4.3	2.8	2.9	4.2	5.7	6.9	7.5	7.2	6.2	5.2	3.6	3.5	4.5	3.0	3.2	4.4	5.9	7.0	7.6	8.3	7.3	6.3	4.7	4.6	5.6	4.1	4.2	5.3	6.9	8.1	8.7
0.3	8.4	7.3	6.0	3.9	3.9	5.1	3.4	3.5	5.0	6.8	8.1	8.9	8.5	7.3	6.2	4.2	4.1	5.4	3.5	3.8	5.1	7.0	8.3	9.0	9.8	8.6	7.5	5.5	5.4	6.7	4.8	5.0	6.2	8.2	9.6	10.3
0.3	9.7	8.4	6.9	4.5	4.5	5.9	3.9	4.0	5.7	7.8	9.3	10.2	9.8	8.4	7.1	4.9	4.8	6.2	4.0	4.4	5.9	8.1	9.6	10.4	11.3	9.9	8.6	6.4	6.3	7.7	5.5	5.7	7.2	9.5	11.1	11.9
0.3	11.0	9.5	7.8	5.1	5.1	6.7	4.4	4.5	6.5	8.8	10.6	11.6	11.1	9.6	8.1	5.5	5.4	7.0	4.6	5.0	6.7	9.2	10.8	11.8	12.8	11.3	9.8	7.2	7.1	8.7	6.3	6.5	8.2	10.7	12.5	13.5
0.4	12.3	10.6	8.7	5.7	5.7	7.4	4.9	5.1	7.3	9.9	11.8	13.0	12.4	10.7	9.0	6.1	6.0	7.8	5.1	5.6	7.5	10.3	12.1	13.1	14.3	12.6	10.9	8.0	7.9	9.7	7.0	7.2	9.1	12.0	14.0	15.0
0.4	13.6	11.8	9.6	6.3	6.3	8.2	5.4	5.6	8.0	10.9	13.1	14.3	13.8	11.8	10.0	6.8	6.7	8.7	5.6	6.2	8.3	11.3	13.4	14.5	15.9	13.9	12.1	8.9	8.8	10.8	7.7	8.0	10.1	13.3	15.5	16.6
0.5	14.9	12.9	10.5	6.9	6.9	9.0	5.9	6.2	8.8	12.0	14.3	15.7	15.1	12.9	10.9	7.4	7.3	9.5	6.2	6.8	9.1	12.4	14.7	15.9	17.4	15.2	13.2	9.7	9.6	11.8	8.5	8.8	11.1	14.5	17.0	18.2
0.5	16.2	14.0	11.5	7.5	7.5	9.8	6.5	6.7	9.5	13.0	15.6	17.1	16.4	14.1	11.9	8.1	7.9	10.3	6.7	7.4	9.9	13.5	15.9	17.3	18.9	16.6	14.4	10.6	10.4	12.8	9.2	9.5	12.0	15.8	18.4	19.8
0.5	17.5	15.1	12.4	8.1	8.1	10.6	7.0	7.2	10.3	14.0	16.8	18.4	17.7	15.2	12.8	8.7	8.6	11.1	7.2	7.9	10.7	14.6	17.2	18.7	20.4	17.9	15.5	11.4	11.3	13.8	9.9	10.3	13.0	17.1	19.9	21.4
0.6	18.8	16.2	13.3	8.7	8.7	11.4	7.5	7.8	11.1	15.1	18.1	19.8	19.0	16.3	13.8	9.4	9.2	12.0	7.8	8.5	11.5	15.7	18.5	20.1	21.9	19.2	16.7	12.3	12.1	14.9	10.7	11.1	13.9	18.3	21.4	23.0
0.6	20.1	17.4	14.2	9.3	9.3	12.2	8.0	8.3	11.8	16.1	19.3	21.2	20.3	17.4	14.7	10.0	9.8	12.8	8.3	9.1	12.3	16.8	19.8	21.4	23.4	20.5	17.8	13.1	12.9	15.9	11.4	11.8	14.9	19.6	22.9	24.5
0.7	21.4	18.5	15.1	9.9	9.9	12.9	8.5	8.8	12.6	17.2	20.6	22.5	21.6	18.6	15.7	10.7	10.5	13.6	8.9	9.7	13.1	17.8	21.0	22.8	24.9	21.9	19.0	14.0	13.8	16.9	12.2	12.6	15.9	20.8	24.3	26.1
0.7	22.7	19.6	16.1	10.5	10.5	13.7	9.0	9.4	13.4	18.2	21.8	23.9	22.9	19.7	16.6	11.3	11.1	14.5	9.4	10.3	13.9	18.9	22.3	24.2	26.4	23.2	20.1	14.8	14.6	17.9	12.9	13.4	16.8	22.1	25.8	27.7
0.7	24.0	20.7	17.0	11.1	11.1	14.5	9.6	9.9	14.1	19.2	23.1	25.3	24.2	20.8	17.6	12.0	11.7	15.3	9.9	10.9	14.6	20.0	23.6	25.6	27.9	24.5	21.3	15.7	15.4	19.0	13.6	14.1	17.8	23.4	27.3	29.3
0.8	25.3	21.8	17.9	11.7	11.7	15.3	10.1	10.4	14.9	20.3	24.3	26.6	25.5	21.9	18.5	12.6	12.4	16.1	10.5	11.5	15.4	21.1	24.9	27.0	28.7	24.8	21.1	16.1	16.3	19.9	13.8	14.9	18.7	24.6	28.6	30.3
0.8	26.6	23.0	18.8	12.3	12.3	16.1	10.6	11.0	15.6	21.3	25.6	28.0	26.9	23.1	19.5	13.3	13.0	16.9	11.0	12.1	16.2	22.2	26.1	28.3	31.0	27.2	23.6	17.4	17.1	21.0	15.1	15.6	19.7	25.9	30.2	32.4
0.9	27.9	24.1	19.7	12.9	12.9	16.9	11.1	11.5	16.4	22.4	26.8	29.4	28.2	24.2	20.4	13.9	13.6	17.8	11.5	12.7	17.0	23.2	27.4	29.7	32.5	28.5	24.7	18.2	17.9	22.0	15.8	16.4	20.7	27.2	31.7	34.0
0.9	29.2	25.2	20.6	13.5	13.5	17.6	11.6	12.0	17.2	23.4	28.0	30.7	29.5	25.3	21.4	14.6	14.3	18.6	12.1	13.2	17.8	24.3	28.7	31.1	34.0	29.8	25.9	19.1	18.8	23.1	16.6	17.2	21.6	28.4	33.2	35.6
0.9	30.5	26.3	21.6	14.1	14.0	18.4	12.1	12.6	17.9	24.4	29.3	32.1	30.8	26.4	22.3	15.2	14.9	19.4	12.6	13.8	18.6	25.4	30.0	32.5	35.5	31.1	27.0	19.9	19.6	24.1	17.3	17.9	22.6	29.7	34.7	37.2
1.0	31.8	27.5	22.5	14.7	14.6	19.2	12.7	13.1	18.7	25.5	30.5	33.5	32.1	27.6	23.3	15.8	15.5	20.2	13.2	14.4	19.4	26.5	31.2	33.9	37.0	32.5	28.2	20.7	20.4	25.1	18.1	18.7	23.6	31.0	36.1	38.8
1.0	33.1	28.6	23.4	15.3	15.2	20.0	13.2	13.6	19.5	26.5	31.8	34.8	33.4	28.7	24.2	16.5	16.2	21.1	13.7	15.0	20.2	27.6	32.5	35.3	38.5	33.8	29.3	21.6	21.3	26.1	18.8	19.5	24.5	32.2	37.6	40.4
1.1	34.4	29.7	24.3	15.9	15.8	20.8	13.7	14.2	20.2	27.6	33.0	36.2	34.7	29.8	25.2	17.1	16.8	21.9	14.2	15.6	21.0	28.6	33.8	36.6	40.0	35.1	30.5	22.4	22.1	27.2	19.5	20.2	25.5	33.5	39.1	41.9
1.1	35.7	30.8	25.2	16.5	16.4	21.6	14.2	14.7	21.0	28.6	34.3	37.6	36.0	30.9	26.1	17.8	17.4	22.7	14.8	16.2	21.8	29.7	35.1	38.0	41.5	36.4	31.6	23.3	22.9	28.2	20.3	21.0	26.4	34.7	40.6	43.5

Group D													Group E													Group F													Group G												
1.А.	1.В.	1.С.	1.Д.	1.Е.	1.Ж.	1.З.	1.И.	1.Й.	1.К.	1.Л.	1.М.	1.Н.	1.А.	1.В.	1.С.	1.Д.	1.Е.	1.Ж.	1.З.	1.И.	1.Й.	1.К.	1.Л.	1.М.	1.Н.	1.А.	1.В.	1.С.	1.Д.	1.Е.	1.Ж.	1.З.	1.И.	1.Й.	1.К.	1.Л.	1.М.	1.Н.	1.А.	1.В.	1.С.	1.Д.	1.Е.	1.Ж.	1.З.	1.И.	1.Й.	1.К.	1.Л.	1.М.	1.Н.
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
0.8	0.8	0.7	0.7	0.6	0.6	0.7	0.7	0.8	0.8	0.8	0.8	0.8	1.2	1.1	1.1	1.1	1.0	1.0	1.0	1.0	1.0	1.1	1.1	1.1	1.2	1.1	1.1	1.1	1.0	1.0	1.0	1.0	1.0	1.1	1.1	1.1	1.2	1.1	1.1	1.1	1.0	1.0	1.0	1.0	1.0	1.1	1.1	1.1	1.1		
2.4	2.3	2.1	2.0	1.9	1.9	2.0	2.2	2.3	2.4	2.5	2.9	2.8	3.5	3.4	3.4	3.2	3.1	2.9	3.0	3.1	3.2	3.3	3.5	3.6	4.3	4.3	4.3	4.0	3.9	3.7	3.8	3.9	4.0	4.1	4.3	4.4	7.2	7.1	7.1	6.6	6.5	6.2	6.3	6.4	6.6	6.8	7.1	7.3			
4.0	3.8	3.9	3.6	3.4	3.2	3.2	3.4	3.6	3.9	4.1	4.2	4.9	4.7	5.9	5.7	5.7	5.3	5.1	4.9	4.9	5.1	5.3	5.5	5.8	5.9	7.2	7.1	7.1	6.6	6.5	6.2	6.3	6.4	6.6	6.8	7.1	7.3														
5.6	5.4	5.4	5.0	4.7	4.4	4.4	4.8	5.0	5.4	5.7	5.8	6.8	6.6	8.2	8.0	8.0	7.4	7.2	6.8	6.9	7.1	7.4	7.7	8.1	8.3	10.1	9.9	9.9	9.2	9.1	8.6	8.8	9.0	9.2	9.5	10.0	10.2														
7.2	6.9	6.9	6.4	6.1	5.7	5.7	6.1	6.5	6.9	7.3	7.5	8.8	8.5	10.6	10.3	10.3	9.6	9.3	8.8	8.9	9.2	9.5	9.9	10.4	10.7	13.0	12.8	12.8	11.9	11.7	11.1	11.3	11.6	11.9	12.2	12.8	13.2														
8.8	8.4	8.5	7.9	7.4	6.9	7.0	7.5	7.9	8.5	8.9	9.2	10.7	10.3	12.9	12.5	12.6	11.7	11.3	10.7	10.9	11.2	11.7	12.2	12.7	13.1	15.9	15.6	15.6	14.5	14.3	13.6	13.8	14.2	14.5	14.9	15.7	16.1														
10.4	10.0	10.0	9.3	8.8	8.2	8.2	8.9	9.4	10.0	10.5	10.9	12.7	12.2	15.2	14.8	14.9	13.8	13.4	12.6	12.8	13.2	13.8	14.4	15.0	15.4	18.8	18.5	18.4	17.2	16.9	16.0	16.4	16.7	17.2	17.7	18.5	19.0														
12.0	11.5	11.6	10.7	10.1	9.5	9.5	10.2	10.8	11.6	12.2	12.5	14.6	14.1	17.6	17.1	17.2	16.0	15.4	14.6	14.8	15.3	15.9	16.6	17.4	17.8	21.7	21.3	21.3	19.8	19.5	18.5	18.9	19.3	19.8	20.4	21.3	21.9														
13.6	13.0	13.1	12.1	11.5	10.7	10.8	11.6	12.3	13.1	13.8	14.2	16.6	16.0	19.9	19.4	19.5	18.1	17.5	16.5	16.8	17.3	18.0	18.8	19.7	20.2	24.6	24.1	24.1	22.4	22.1	20.9	21.4	21.9	22.5	23.1	24.2	24.9														
15.2	14.6	14.7	13.6	12.8	12.0	12.1	12.9	13.7	14.7	15.4	15.9	18.5	17.9	22.3	21.7	21.8	20.2	19.5	18.5	18.8	19.3	20.1	21.0	22.0	22.6	27.5	27.0	27.0	25.1	24.7	23.4	23.9	24.5	25.1	25.8	27.0	27.8														
16.8	16.1	16.2	15.0	14.2	13.2	13.3	14.3	15.1	16.2	17.0	17.5	20.5	19.7	24.6	23.9	24.1	22.3	21.6	20.4	20.8	21.4	22.3	23.2	24.3	24.9	30.4	29.8	29.8	27.7	27.3	25.9	26.4	27.0	27.7	28.5	29.9	30.7														
18.4	17.6	17.7	16.4	15.5	14.5	14.6	15.7	16.6	17.7	18.7	19.2	22.4	21.6	27.0	26.2	26.4	24.5	23.6	22.4	22.7	23.4	24.4	25.4	26.6	27.3	33.3	32.7	32.6	30.3	29.9	28.3	28.9	29.6	30.4	31.3	32.7	33.6														
20.0	19.2	19.3	17.8	16.9	15.8	15.9	17.0	18.0	19.3	20.3	20.9	24.4	23.5	21.4	18.9	16.5	13.3	12.5	11.6	12.5	14.9	16.7	18.1	21.3	22.4	36.2	35.5	35.5	33.0	32.5	30.8	31.5	32.2	33.0	34.0	35.6	36.6														
21.6	20.7	20.8	19.3	18.2	17.0	17.1	18.4	19.5	20.8	21.9	22.6	26.3	25.4	31.7	30.8	31.0	28.7	27.8	26.3	26.7	27.5	28.6	29.8	31.3	32.1	39.1	38.3	38.3	35.6	35.1	33.3	34.0	34.8	35.7	36.7	38.4	39.5														
23.3	22.2	22.4	20.7	19.6	18.3	18.4	19.8	20.9	22.4	23.5	24.2	28.3	27.2	34.0	33.0	33.3	30.8	29.8	28.2	28.7	29.5	30.8	32.1	33.6	34.4	42.0	41.2	41.1	38.3	37.7	35.7	36.5	37.3	38.3	39.4	41.3	42.4														
24.9	23.8	23.9	22.1	20.9	19.5	19.7	21.1	22.3	23.9	25.2	25.9	30.2	29.1	36.4	35.3	35.6	33.0	31.9	30.1	30.6	31.6	32.9	34.3	35.9	36.8	44.9	44.0	44.0	40.9	40.3	38.2	39.0	39.9	40.9	42.1	44.1	45.3														
26.5	25.3	25.5	23.6	22.3	20.8	20.9	22.5	23.8	25.5	26.8	27.6	32.2	31.0	38.7	37.6	37.9	35.1	33.9	32.1	32.6	33.6	35.0	36.5	38.2	39.2	47.8	46.9	46.8	43.5	42.9	40.7	41.5	42.5	43.6	44.8	47.0	48.3														
28.1	26.8	27.0	25.0	23.7	22.1	22.2	23.9	25.2	27.0	28.4	29.2	34.2	32.9	41.1	39.9	40.2	37.2	36.0	34.0	34.6	35.6	37.1	38.7	40.5	41.5	50.7	49.7	49.7	46.2	45.5	43.1	44.0	45.1	46.2	47.6	49.8	51.2														
29.7	28.4	28.5	26.4	25.0	23.3	23.5	25.2	26.7	28.6	30.0	30.9	36.1	34.8	43.4	42.2	42.5	38.3	38.0	36.0	36.6	37.7	39.2	40.9	42.8	43.9	53.6	52.5	52.5	48.8	48.1	45.6	46.6	47.6	48.9	50.3	52.7	54.1														
31.3	29.9	30.1	27.8	26.4	24.6	24.7	26.6	28.1	30.1	31.6	32.6	38.1	36.6	45.7	44.4	44.8	41.5	40.1	37.9	38.5	39.7	41.4	43.1	45.1	46.3	56.5	55.4	55.4	51.5	50.7	48.1	49.1	50.2	51.5	53.0	55.5	57.0														
32.9	31.5	31.6	29.3	27.7	25.8	26.0	27.9	29.5	31.6	33.3	34.2	40.0	38.5	50.4	49.0	49.4	45.7	44.2	41.8	42.5	43.8	45.6	47.5	49.8	51.0	59.4	58.2	58.2	54.1	53.3	50.5	51.6	52.8	54.1	55.3	58.8	61.2														
34.5	33.0	33.2	30.7	29.1	27.1	27.3	29.3	31.0	33.2	34.9	35.9	42.0	40.4	52.8	51.3	51.7	47.9	46.3	43.8	44.5	45.8	47.7	49.7	52.1	53.4	62.3	61.1	61.0	57.5	56.8	53.0	54.1	55.3	56.8	58.4	61.2	62.9														
36.1	34.5	34.7	32.1	30.4	28.4	28.5	30.7	32.4	34.7	36.5	37.6	43.9	42.3	55.1	53.6	54.0	50.0	48.3	45.7	46.5	47.8	49.8	51.9	54.4	55.8	65.4	63.9	63.8	59.4	58.4	55.4	56.6	57.9	59.4	61.1	64.0	65.8														
37.7	36.1	36.3	33.6	31.8	29.6	29.8	32.0	33.9	36.3	38.1	39.3	45.9	44.2	57.5	55.8	56.3	52.1	50.4	47.6	48.4	49.9	52.0	54.2	56.7	58.2	68.1	66.6	66.6	62.0	61.0	57.9	59.1	60.5	62.1	63.9	66.9	68.8														
39.3	37.6	37.8	35.0	33.1	30.9	31.1	33.4	35.3	37.8	39.8	40.9	47.8	46.0	59.8	58.1	58.6	54.2	52.4	49.6	50.4	51.9	54.1	56.4	59.0	60.5	71.0	69.6	69.5	64.7	63.6	60.4	61.7	63.1	64.7	66.6	69.7	71.7														
40.9	39.1	39.3	36.4	34.5	32.2	32.4	34.8	36.8	39.4	41.4	42.6	49.8	47.9	62.2	60.4	60.9	56.4	54.5	51.5	52.4	54.0	56.2	58.6	61.3	62.9	73.9	72.4	72.4	67.3	66.2	62.8	64.2	65.6	67.4	69.3	72.6	74.6														
42.5	40.7	40.9	37.8	35.8	33.4	33.6	36.1	38.2	40.9	43.0	44.3	51.7	49.8	64.5	62.7	63.2	58.5	56.6	53.5	54.4	56.0	58.3	60.8	63.7	65.3	76.8	75.3	75.2	69.9	68.8	65.3	66.7	68.2	70.0	72.0	75.4	77.5														
44.1	42.2	42.4	39.3	37.2	34.7	34.9	37.5	39.6	42.4	44.6	45.9	53.7	51.7	68.4	66.7	67.2	62.6	60.7	57.6	58.5	60.1	62.4	64.8	67.3	68.8	79.7	78.1	78.0	72.6	71.4	67.8	69.2	70.8	72.6	74.7	78.3	80.5														

W

U	Group A										Group B										Group C									
	31.A	01.A	11.A	21.A	31.A	41.A	51.A	61.A	71.A	81.A	31.A	01.A	11.A	21.A	31.A	41.A	51.A	61.A	71.A	81.A	31.A	01.A	11.A	21.A	31.A	41.A	51.A	61.A	71.A	81.A
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0.0	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.5	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.4	0.5	0.6	0.7	0.7	0.7	0.6	0.7	0.6	0.6	
0.1	1.2	1.4	1.5	1.5	1.4	1.4	1.4	1.4	1.3	1.2	1.3	1.3	1.4	1.7	1.7	1.6	1.6	1.6	1.5	1.3	1.4	1.7	1.8	2.0	2.0	1.9	2.0	1.9	1.7	
0.1	2.0	2.3	2.6	2.4	2.5	2.3	2.3	2.4	2.3	2.2	1.9	2.1	2.2	2.4	2.8	2.8	2.7	2.7	2.7	2.6	2.5	2.2	2.3	2.9	3.0	3.4	3.4	3.2	3.1	
0.1	2.8	3.2	3.6	3.4	3.5	3.3	3.3	3.3	3.2	3.0	2.7	2.9	3.0	3.3	3.9	3.9	4.0	3.8	3.7	3.8	3.6	3.4	3.1	3.3	4.0	4.3	4.7	4.8	4.5	
0.2	3.6	4.1	4.6	4.4	4.5	4.2	4.2	4.2	4.2	3.9	3.5	3.8	3.9	4.3	5.0	5.0	5.1	4.8	4.8	4.9	4.7	4.4	3.9	4.2	5.1	5.5	6.1	6.1	5.9	
0.2	4.5	5.0	5.7	5.4	5.5	5.1	5.1	5.2	5.1	4.8	4.2	4.6	4.8	5.2	6.1	6.1	6.3	5.9	5.8	5.9	5.7	5.4	4.8	5.1	6.3	6.7	7.4	7.5	7.2	
0.3	5.3	6.0	6.7	6.3	6.5	6.1	6.1	6.1	6.0	5.6	5.0	5.4	5.7	6.2	7.2	7.2	7.4	7.0	6.9	7.0	6.7	6.4	5.7	6.1	7.4	7.9	8.8	8.8	8.5	
0.3	6.1	6.9	7.7	7.3	7.6	7.0	7.0	7.1	6.9	6.5	5.8	6.3	6.5	7.1	8.3	8.4	8.5	8.0	8.0	8.1	7.8	7.4	6.6	7.0	8.6	9.1	10.2	10.2	9.8	
0.3	6.9	7.8	8.8	8.3	8.6	7.9	8.0	8.0	7.8	7.4	6.5	7.1	7.4	8.1	9.4	9.5	9.7	9.1	9.0	9.2	8.8	8.4	7.5	7.9	9.7	10.3	11.5	11.6	11.1	
0.4	7.7	8.7	9.8	9.3	9.6	8.9	8.9	8.9	8.8	8.2	7.3	8.0	8.3	9.0	10.5	10.6	10.8	10.2	10.1	10.3	9.9	9.4	8.3	8.9	10.8	11.6	12.9	12.9	12.4	
0.4	8.5	9.6	10.8	10.2	10.6	9.8	9.8	9.9	9.7	9.1	8.1	8.8	9.1	10.0	11.6	11.7	12.0	11.3	11.2	11.3	10.9	10.3	9.2	9.8	12.0	12.8	14.2	14.3	13.7	
0.5	9.3	10.5	11.8	11.2	11.6	10.7	10.8	10.8	10.6	10.0	8.9	9.6	10.0	10.9	12.7	12.8	13.1	12.3	12.2	12.4	11.9	11.3	10.1	10.7	13.1	14.0	15.6	15.7	15.0	
0.5	10.1	11.5	12.9	12.2	12.6	11.7	11.7	11.8	11.5	10.8	9.6	10.5	10.9	11.9	13.8	13.9	14.2	13.4	13.3	13.5	13.0	12.3	11.0	11.7	14.3	15.2	16.9	17.0	17.1	
0.5	10.9	12.4	13.9	13.2	13.6	12.6	12.6	12.7	12.5	11.7	10.4	11.3	11.8	12.8	14.9	15.0	15.4	14.5	14.3	14.6	14.0	13.3	11.8	12.6	15.4	16.4	18.3	18.4	17.6	
0.6	11.8	13.3	14.9	14.1	14.6	13.5	13.6	13.6	13.4	12.6	11.2	12.1	12.6	13.8	16.0	16.1	16.5	15.6	15.4	15.6	15.0	14.3	12.7	13.6	16.6	17.6	19.6	19.7	19.8	
0.6	12.6	14.2	16.0	15.1	15.6	14.5	14.5	14.6	14.3	13.4	11.9	13.0	13.5	14.7	17.1	17.3	17.7	16.6	16.5	16.7	16.1	15.3	13.6	14.5	17.7	18.9	21.0	21.1	21.1	
0.7	13.4	15.1	17.0	16.1	16.6	15.4	15.4	15.5	15.2	14.3	12.7	13.8	14.4	15.7	18.2	18.4	18.8	17.7	17.5	17.8	17.1	16.2	14.5	15.4	18.8	20.1	22.3	22.5	21.3	
0.7	14.2	16.0	18.0	17.1	17.6	16.3	16.4	16.5	16.2	15.2	13.5	14.7	15.2	16.6	19.3	19.5	19.9	18.8	18.6	18.9	18.2	17.2	15.3	16.4	20.0	21.3	23.7	23.8	22.9	
0.7	15.0	17.0	19.1	18.0	18.6	17.3	17.3	17.4	17.1	16.0	14.3	15.5	16.1	17.6	20.4	20.6	21.1	19.8	19.7	20.0	19.2	18.2	16.2	17.3	21.1	22.5	25.0	25.2	24.2	
0.8	15.8	17.9	20.1	19.0	19.6	18.2	18.2	18.3	18.0	16.9	15.0	16.3	17.0	18.5	21.5	21.7	22.2	20.9	20.7	21.0	20.2	19.2	17.1	18.2	22.3	23.7	26.4	26.5	25.5	
0.8	16.6	18.8	21.1	20.0	20.7	19.1	19.2	19.3	18.9	17.8	15.8	17.2	17.8	19.5	22.6	22.8	23.4	22.0	21.8	22.1	21.3	20.2	18.0	19.2	23.4	24.9	27.8	27.9	28.0	
0.9	17.4	19.7	22.1	21.0	21.7	20.1	20.1	20.2	19.9	18.6	16.6	18.0	18.7	20.4	23.7	23.9	24.5	23.1	22.8	23.2	22.3	21.2	18.8	20.1	24.5	26.2	29.1	29.3	28.1	
0.9	18.2	20.6	23.2	21.9	22.7	21.0	21.0	21.2	20.8	19.5	17.3	18.8	19.6	21.4	24.8	25.1	25.6	24.1	23.9	24.3	23.3	22.1	19.7	21.0	25.7	27.4	30.5	30.6	30.7	
0.9	19.1	21.5	24.2	22.9	23.7	21.9	22.0	22.1	21.7	20.3	18.1	19.7	20.5	22.3	25.9	26.2	26.8	25.2	25.0	25.4	24.4	23.1	20.6	22.0	26.8	28.6	31.8	32.0	32.1	
1.0	19.9	22.5	25.2	23.9	24.7	22.9	22.9	23.0	22.6	21.2	18.9	20.5	21.3	23.3	27.0	27.3	27.9	26.3	26.0	26.4	25.4	24.1	21.5	22.9	28.0	29.8	33.2	33.3	33.4	
1.0	20.7	23.4	26.3	24.9	25.7	23.8	23.9	23.9	23.6	22.1	20.0	21.6	22.2	24.2	28.1	28.4	29.1	27.4	27.1	27.4	26.4	25.1	22.6	24.0	29.1	31.0	34.5	34.7	34.8	
1.1	21.5	24.3	27.3	25.8	26.7	24.7	24.8	24.9	24.5	22.9	20.4	22.2	23.1	25.2	29.2	29.5	30.2	28.4	28.2	28.6	27.5	26.1	23.2	24.8	30.2	32.2	35.9	36.1	36.2	
1.1	22.3	25.2	28.3	26.8	27.7	25.7	25.7	25.9	25.4	23.8	21.2	23.0	23.9	26.1	30.3	30.6	31.3	29.5	29.2	29.7	28.5	27.1	24.1	25.7	31.4	33.5	37.2	37.4	37.5	

Group D								Group E								Group F								Group G																							
Л.Р.	Н.П.	И.А.	Ш.И.	В.Р.	Ю.В.	С.П.	С.Р.	Л.Р.	Н.П.	И.А.	Ш.И.	В.Р.	Ю.В.	С.П.	С.Р.	Л.Р.	Н.П.	И.А.	Ш.И.	В.Р.	Ю.В.	С.П.	С.Р.	Л.Р.	Н.П.	И.А.	Ш.И.	В.Р.	Ю.В.	С.П.	С.Р.																
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.9	0.9	1.0	1.0	1.0	0.9	1.0	0.9	0.9	0.9	0.9	1.1	1.2	1.2	1.2	1.2	1.2	1.1	1.1	1.1	1.1	1.4	1.5	1.6	1.5	1.5	1.5	1.5	1.4	1.4	1.5								
2.1	2.2	2.4	2.4	2.3	2.3	2.3	2.2	2.1	2.7	2.8	3.0	3.0	2.9	2.8	2.9	2.8	2.8	2.7	2.8	3.3	3.5	3.7	3.6	3.5	3.5	3.5	3.4	3.3	3.4	4.3	4.4	4.7	4.6	4.6	4.4	4.4	4.3	4.3	4.2	4.4							
3.5	3.6	4.0	4.0	4.0	3.9	3.9	3.8	3.7	4.5	4.7	5.0	4.9	4.8	4.7	4.8	4.7	4.6	4.5	4.6	5.6	5.8	6.1	6.1	6.0	5.9	5.8	5.9	5.7	5.6	5.7	7.2	7.4	7.8	7.6	7.7	7.4	7.4	7.2	7.1	7.1	7.3						
4.8	5.1	5.6	5.6	5.4	5.4	5.4	5.3	5.2	6.3	6.6	7.0	6.9	6.9	6.7	6.6	6.7	6.5	6.5	6.3	7.8	8.1	8.5	8.5	8.4	8.3	8.2	8.3	8.1	8.0	7.8	8.0	10.0	10.4	10.9	10.6	10.3	10.4	10.3	10.1	10.0	9.9	10.2					
6.2	6.6	7.2	7.2	7.0	7.0	6.9	7.0	6.8	8.1	8.4	9.0	8.9	8.9	8.7	8.5	8.7	8.4	8.4	8.0	8.3	10.0	10.4	11.0	10.9	10.9	10.6	10.5	10.6	10.4	10.3	10.0	10.2	12.9	13.3	14.0	13.7	13.8	13.3	13.2	13.0	12.8	12.7	13.1				
7.6	8.0	8.6	8.6	8.5	8.4	8.5	8.3	8.1	7.9	9.9	10.3	11.0	10.9	10.9	10.6	10.4	10.6	10.3	10.2	9.8	10.1	12.3	12.7	13.4	13.3	13.3	13.0	12.8	13.0	12.7	12.6	12.2	12.5	15.8	16.3	17.1	16.7	16.9	16.2	16.3	16.2	15.9	15.7	15.5	16.0		
9.0	9.5	10.4	10.4	10.4	10.0	10.0	10.1	9.8	9.0	9.4	11.6	12.2	13.0	12.9	12.8	12.5	12.3	12.5	12.1	12.1	11.6	11.9	14.5	15.0	15.9	15.7	15.7	15.4	15.1	15.4	15.0	14.9	14.5	14.8	18.7	19.3	20.2	19.8	20.0	19.2	19.2	19.1	18.8	18.5	18.4	18.9	
10.4	10.9	12.0	12.0	12.0	11.6	11.5	11.6	11.3	11.1	10.4	10.8	13.4	14.0	15.0	14.9	14.8	14.4	14.2	14.4	14.0	13.9	13.4	13.8	16.7	17.3	18.3	18.2	18.1	17.7	17.5	17.7	17.3	17.2	16.7	17.1	21.5	22.2	23.3	22.8	23.1	22.1	22.2	22.1	21.7	21.4	21.2	21.8
11.7	12.4	13.5	13.6	13.6	13.1	13.0	13.2	12.8	12.6	11.8	12.2	15.2	15.9	17.0	16.8	16.8	16.4	16.1	16.3	15.9	15.8	15.2	15.6	19.0	19.6	20.8	20.6	20.5	20.1	19.8	20.1	19.6	19.5	18.9	19.3	24.4	25.2	26.4	25.8	26.1	25.1	25.1	25.0	24.6	24.2	24.0	24.7
13.1	13.8	15.1	15.2	15.2	14.7	14.5	14.7	14.4	14.1	13.2	13.7	17.0	17.8	19.0	18.8	18.7	18.3	18.0	18.3	17.8	17.6	17.0	17.4	21.2	22.0	23.2	23.0	22.9	22.5	22.1	22.4	21.9	21.8	21.2	21.6	27.3	28.2	29.5	28.9	29.2	28.0	28.1	27.9	27.5	27.1	26.8	27.6
14.5	15.3	16.7	16.8	16.8	16.2	16.1	16.3	15.9	15.5	14.6	15.1	18.8	19.7	21.0	20.8	20.7	20.2	19.8	20.2	19.6	19.5	18.8	19.3	23.4	24.3	25.6	25.4	25.3	24.8	24.5	24.8	24.2	24.1	23.4	23.9	30.1	31.1	32.7	31.9	32.3	31.0	31.1	30.9	30.4	30.0	29.7	30.5
15.9	16.8	18.3	18.4	18.4	17.8	17.6	17.8	17.4	17.0	16.0	16.6	20.6	21.5	23.0	22.8	22.7	22.1	21.7	22.1	21.5	21.4	20.6	21.1	25.7	26.6	28.1	27.8	27.8	27.2	26.8	27.2	26.5	26.4	25.6	26.2	33.0	34.1	35.8	35.0	35.4	33.9	34.0	33.8	33.3	32.8	32.5	33.4
17.3	18.2	19.9	20.0	20.1	19.3	18.1	18.4	18.9	18.5	17.4	18.0	22.4	23.4	25.0	24.8	24.7	24.0	23.6	24.0	23.4	23.2	22.3	22.9	27.9	28.9	30.5	30.3	30.2	29.5	29.1	29.5	28.9	28.7	27.8	28.4	35.9	37.1	38.9	38.0	38.4	36.9	37.0	36.8	36.2	35.7	35.3	36.3
18.6	19.7	21.5	21.6	21.7	20.9	20.7	20.9	20.4	20.0	18.7	19.4	24.2	25.3	27.0	26.8	26.6	26.0	25.5	26.0	25.2	25.1	24.1	24.8	30.1	31.2	33.0	32.7	32.6	31.9	31.5	31.9	31.2	31.0	30.1	30.7	38.7	40.0	42.0	41.1	41.5	39.8	39.9	39.7	39.1	38.5	38.1	39.2
20.0	21.1	23.1	23.2	23.3	22.4	22.2	22.5	21.9	21.5	20.1	20.9	26.0	27.1	29.0	28.7	28.6	27.9	27.4	27.9	27.1	26.9	25.9	26.6	32.4	33.5	35.4	35.1	35.0	34.3	33.8	34.3	33.5	33.3	32.3	33.0	41.6	43.0	45.1	44.1	44.6	42.8	42.9	42.7	42.0	41.4	41.0	42.1
21.4	22.6	24.7	24.8	24.9	24.0	23.7	24.0	23.4	23.0	21.5	22.3	27.8	29.0	31.0	30.7	30.6	29.8	29.3	29.8	29.0	28.8	27.7	28.4	34.6	35.8	37.9	37.5	37.4	36.6	36.1	36.6	35.8	35.6	34.5	35.2	44.5	46.0	48.2	47.1	47.7	45.7	45.9	45.6	44.9	44.2	43.8	45.0
22.8	24.0	26.3	26.4	26.5	25.5	25.3	25.6	24.9	24.4	22.9	23.8	29.6	30.9	33.0	32.7	32.5	31.7	31.2	31.7	30.8	30.6	29.5	30.3	36.8	38.1	40.3	40.0	39.8	39.0	38.5	39.0	38.1	37.9	36.7	37.5	47.4	48.9	51.3	50.2	50.7	48.7	48.8	48.5	47.8	47.1	46.6	47.9
24.2	25.5	27.9	28.0	28.1	27.1	26.8	27.1	26.5	25.9	24.3	25.2	31.4	32.8	35.0	34.7	34.5	33.7	33.1	33.6	32.7	32.5	31.3	32.1	39.1	40.5	42.7	42.4	42.2	41.4	40.8	41.3	40.4	40.2	39.0	39.8	50.2	51.9	54.4	53.2	53.8	51.6	51.8	51.5	50.7	49.9	49.4	50.8
25.6	26.9	29.5	29.6	29.7	28.6	28.3	28.6	28.0	27.4	25.7	26.6	33.1	34.6	37.0	36.7	36.5	35.6	35.0	35.6	34.6	34.4	33.1	33.9	41.3	42.8	45.2	44.8	44.6	43.7	43.1	43.7	42.7	42.5	41.2	42.1	53.1	54.8	57.5	56.3	56.9	54.6	54.7	54.4	53.6	52.8	52.3	53.7
26.9	28.4	31.1	31.2	31.3	30.1	29.9	30.2	29.5	28.9	27.1	28.1	34.9	36.5	39.0	38.6	38.5	37.5	36.9	37.5	36.4	36.2	34.8	35.8	43.5	45.1	47.6	47.2	47.1	46.1	45.4	46.1	45.0	44.8	43.4	44.3	56.0	57.8	60.7	59.3	60.0	57.5	57.7	57.4	56.5	55.6	55.1	56.6
28.3	29.9	32.7	32.8	32.9	31.7	31.4	31.7	31.0	30.4	28.5	29.5	36.7	38.4	41.0	40.6	40.4	39.4	38.8	38.4	38.3	38.1	36.6	37.6	45.7	47.4	50.1	49.6	49.5	48.5	47.8	48.4	47.3	47.1	45.7	46.6	58.8	60.8	63.8	62.3	63.0	60.5	60.6	60.3	59.4	58.5	57.9	59.5
29.7	31.3	34.3	34.4	34.5	33.2	32.9	33.3	32.5	31.8	29.8	31.0	38.5	40.2	43.0	42.6	42.4	41.4	40.6	41.3	40.2	39.9	38.4	39.4	48.0	49.7	52.5	52.1	51.9	50.8	50.1	50.8	49.6	49.4	47.9	48.9	61.7	63.7	66.9	65.4	66.1	63.4	63.6	63.2	62.3	61.3	60.8	62.4
31.1	32.8	35.9	36.0	36.1	34.8	34.5	34.8	34.0	33.3	31.2	32.4	40.3	42.1	45.0	44.6	44.4	43.4	42.5	43.3	42.2	41.8	40.2	41.1	50.2	52.0	54.9	54.5	54.3	53.2	52.4	53.2	51.9	51.7	50.1	51.2	64.6	66.7	70.0	68.4	69.2	66.4	66.6	66.2	65.2	64.2	63.6	65.3
33.8	35.7	39.0	39.2	39.3	37.9	37.5	37.9	37.0	36.3	34.0	35.3	43.9	45.9	49.1	48.5	48.3	47.1	46.3	47.1	45.8	45.5	43.8	44.9	54.7	56.6	59.8	59.3	59.1	57.9	57.1	57.9	56.6	56.3	54.6	55.7	67.4	69.7	73.1	71.5	72.2	69.3	69.5	68.1	68.1	67.0	66.4	68.2
35.2	37.1	40.6	40.8	40.9	39.4	39.0	39.5	38.5	37.8	35.4	36.7	46.7	47.7	51.1	50.5	50.3	49.1	48.2	49.0	47.6	47.4	45.6	46.8	56.9	58.9	62.3	61.7	61.5	60.3	59.4	60.2	58.9	58.6	56.8	58.0	73.2	75.6	79.3	77.5	78.4	75.2	75.4	75.0	73.9	72.7	72.1	74.0
36.6	38.6	42.2	42.4	42.5	41.0	40.6	41.0	40.1	39.2	36.8	38.2	47.5	49.6	53.1	52.5	52.3	51.0	50.1	49.5	49.2	47.4	46.6	59.1	61.3	64.7	64.2	63.9	62.6	61.8	62.6	61.2	60.9	59.0	60.3	76.1	78.6	82.4	80.6	81.5	78.2	78.4	78.0	76.8	75.6	74.9	76.9	
38.0	40.1	43.8	44.0	44.1	42.5	42.1	42.6	41.6	40.7	38.2	39.6	49.3	51.5	55.1	54.5	54.3	52.9	52.0	51.4	51.1	49.1	50.4	61.4	63.6	67.2	66.6	66.4	65.0	64.1	65.0	63.5	63.2	61.2	62.5	78.9	81.5	85.5	83.6	84.5	81.1	81.3	80.9	79.7	78.4	77.7	79.8	

NW

U	Group A						Group B						Group C														
	н.п.	н.п.	н.п.	н.п.	н.п.	н.п.	н.п.	н.п.	н.п.	н.п.	н.п.	н.п.	н.п.	н.п.	н.п.	н.п.	н.п.	н.п.	н.п.	н.п.	н.п.	н.п.	н.п.	н.п.	н.п.	н.п.	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.3	0.4	0.4	0.5	0.5	0.5	0.4	0.4	0.3	0.2	0.3	0.2	0.3	0.2	0.2	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4
0.1	0.8	1.0	1.2	1.5	1.4	1.4	1.1	1.1	0.9	0.7	0.8	0.7	0.8	0.7	0.7	0.8	0.7	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1.1
0.1	1.3	1.6	2.1	2.0	2.5	2.4	2.3	1.9	1.8	1.5	1.2	1.3	1.2	1.4	2.0	2.1	2.6	2.5	2.4	2.0	1.8	1.5	1.2	1.2	1.2	1.8	1.8
0.1	1.9	2.2	2.9	2.8	3.5	3.3	3.2	2.7	2.5	2.1	1.7	1.8	1.7	2.0	2.8	3.0	3.6	3.5	3.3	2.9	2.6	2.1	1.7	1.7	1.7	2.5	2.5
0.2	2.4	2.9	3.7	3.6	4.5	4.3	4.1	3.4	3.3	2.6	2.2	2.3	2.2	2.5	3.6	3.8	4.6	4.5	4.3	3.7	3.3	2.7	2.2	2.2	3.2	3.2	3.2
0.2	2.9	3.5	4.6	4.4	5.5	5.2	5.0	4.2	4.0	3.2	2.7	2.8	2.7	3.1	4.4	4.7	5.7	5.6	5.2	4.5	4.0	3.3	2.7	2.7	3.9	4.0	4.0
0.3	3.4	4.5	6.1	6.5	7.7	7.5	7.2	6.2	5.7	4.8	4.0	4.0	3.2	4.5	6.1	6.5	7.7	7.5	7.2	6.2	5.7	4.8	4.0	4.0	4.6	4.7	4.7
0.3	4.0	4.8	6.2	6.1	7.5	7.1	6.9	5.7	5.4	4.4	3.7	3.9	3.6	4.2	6.0	6.4	7.7	7.6	7.1	6.1	5.5	4.5	3.7	3.7	5.3	5.4	5.4
0.3	4.5	5.4	7.1	6.9	8.5	8.0	7.8	6.5	6.1	5.0	4.2	4.4	4.1	4.8	6.8	7.2	8.8	8.6	8.1	6.9	6.2	5.1	4.1	4.2	6.0	6.1	6.1
0.4	5.0	6.0	7.9	7.7	9.5	9.0	8.7	7.2	6.9	5.6	4.7	4.9	4.6	5.3	7.6	8.1	9.8	9.6	9.0	7.7	6.9	5.7	4.6	4.7	6.7	6.8	6.8
0.4	5.6	6.7	8.7	8.5	10.5	9.9	9.6	8.0	7.6	6.2	5.1	5.4	5.1	5.9	8.4	8.9	10.8	10.6	10.0	8.6	7.7	6.3	5.1	5.2	7.4	7.6	7.6
0.5	6.1	7.3	9.5	9.3	11.5	10.9	10.5	8.8	8.3	6.7	5.6	5.9	5.6	6.5	9.2	9.8	11.9	11.6	10.9	9.4	8.4	6.9	5.6	5.7	8.1	8.3	8.3
0.5	6.6	8.0	10.4	10.1	12.5	11.8	11.4	9.5	9.0	7.3	6.1	6.5	6.1	7.0	10.0	10.6	12.9	12.6	11.9	10.2	9.1	7.5	6.1	6.2	8.8	9.0	9.0
0.5	7.2	8.6	11.2	10.9	13.5	12.8	12.3	10.3	9.8	7.9	6.6	7.0	6.6	7.6	10.8	11.5	13.9	13.6	12.8	11.0	9.8	8.1	6.6	6.7	9.5	9.7	9.7
0.6	7.7	9.2	12.0	11.7	14.5	13.7	13.2	11.0	10.5	8.5	7.1	7.5	7.0	8.1	11.6	12.3	14.9	14.6	13.8	11.8	10.6	8.7	7.1	7.2	10.2	10.4	10.4
0.6	8.2	9.9	12.9	12.5	15.5	14.7	14.2	11.8	11.2	9.1	7.6	8.0	7.5	8.7	12.4	13.2	16.0	15.7	14.7	12.6	11.3	9.3	7.6	7.7	10.9	11.2	11.2
0.7	8.8	10.5	13.7	13.3	16.5	15.6	15.1	12.6	11.9	9.7	8.1	8.5	8.0	9.3	13.2	14.0	17.0	16.7	15.7	13.4	12.0	9.9	8.0	8.2	11.6	11.9	11.9
0.7	9.3	11.1	14.5	14.1	17.5	16.6	16.0	13.3	12.7	10.3	8.6	9.1	8.5	9.8	14.0	14.9	18.0	17.7	16.6	14.3	12.8	10.5	8.5	8.7	12.3	12.6	12.6
0.7	9.8	11.8	15.4	14.9	18.5	17.5	16.9	14.1	13.4	10.8	9.1	9.6	9.0	10.4	14.8	15.7	19.1	18.7	17.6	15.1	13.5	11.1	9.0	9.2	13.0	13.3	13.3
0.8	10.3	12.4	16.2	15.8	19.5	18.5	17.8	14.8	14.1	11.4	9.6	10.1	9.5	10.9	15.6	16.6	20.1	19.7	18.5	15.9	14.2	11.7	9.5	9.6	13.7	14.0	14.0
0.8	10.9	13.0	17.0	16.6	20.5	19.4	18.7	15.6	14.8	12.0	10.1	10.6	10.0	11.5	16.4	17.4	21.1	20.7	19.5	16.7	15.0	12.3	10.0	10.1	14.4	14.8	14.8
0.9	11.4	13.7	17.8	17.4	21.5	20.3	19.6	16.4	15.6	12.6	10.5	11.1	10.4	12.1	17.2	18.3	22.2	21.7	20.4	17.5	15.7	12.9	10.5	10.6	15.1	15.5	15.5
0.9	11.9	14.3	18.7	18.2	22.5	21.3	20.6	17.1	16.3	13.2	11.0	11.6	10.9	12.6	18.0	19.1	23.2	22.7	21.4	18.3	16.4	13.5	11.0	11.1	15.8	16.2	16.2
0.9	12.5	15.0	19.5	19.0	23.5	22.2	21.5	17.9	17.0	13.8	11.5	12.2	11.4	13.2	18.8	20.0	24.2	23.7	22.3	19.1	17.1	14.1	11.5	11.6	16.5	16.9	16.9
1.0	13.0	15.6	20.3	19.8	24.6	23.2	22.4	18.7	17.7	14.4	12.0	12.7	11.9	13.7	19.6	20.9	25.3	24.7	23.3	20.0	17.9	14.6	11.9	12.1	17.2	17.6	17.6
1.0	13.5	16.2	21.2	20.6	25.6	24.1	23.3	19.4	18.4	14.9	12.5	13.2	12.4	14.3	20.4	21.7	26.3	25.7	24.2	20.8	18.6	15.2	12.4	12.6	17.9	18.4	18.4
1.1	14.1	16.9	22.0	21.4	26.6	25.1	24.2	20.2	19.2	15.5	13.0	13.7	12.9	14.9	21.2	22.6	27.3	26.8	25.2	21.6	19.3	15.8	12.9	13.1	18.6	19.1	19.1
1.1	14.6	17.5	22.8	22.2	27.6	26.0	25.1	20.9	19.9	16.1	13.5	14.2	13.3	15.4	22.0	23.4	28.3	27.8	26.1	22.4	20.1	16.4	13.4	13.6	19.3	19.5	19.5

Group D				Group E				Group F				Group G			
1.A.	1.B.	1.C.	1.D.	1.A.	1.B.	1.C.	1.D.	1.A.	1.B.	1.C.	1.D.	1.A.	1.B.	1.C.	1.D.
00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
05	05	06	07	07	06	05	05	06	06	07	06	06	06	06	06
14	15	18	19	21	20	18	17	15	14	14	18	19	22	23	25
23	24	30	31	35	33	30	28	25	23	30	32	37	36	42	40
32	34	42	43	49	47	42	39	35	32	42	45	52	53	59	58
41	44	54	56	63	62	60	53	50	45	41	54	57	67	68	75
50	54	66	68	77	76	73	65	61	55	50	66	70	82	83	92
59	63	78	81	91	90	87	77	72	65	59	85	90	99	100	110
68	73	90	93	105	104	100	89	83	75	68	95	101	110	115	125
77	83	101	105	119	118	113	101	94	85	77	101	108	126	128	142
86	93	113	118	133	132	126	113	106	95	86	113	121	141	143	159
95	103	125	130	147	146	140	125	117	105	95	125	134	156	158	176
104	112	137	143	161	159	153	137	128	115	104	137	146	170	173	192
113	122	149	155	178	173	166	149	139	125	114	149	159	185	188	209
122	132	161	168	190	187	180	160	150	135	123	161	172	200	204	226
131	142	173	180	204	201	193	172	161	145	132	173	184	215	219	242
140	151	185	192	218	215	206	184	172	155	141	185	197	230	234	259
149	161	197	205	232	229	220	196	183	165	150	197	210	245	249	276
158	171	209	217	246	243	233	208	195	175	159	209	223	259	264	293
167	181	221	230	260	256	246	220	206	185	168	220	235	274	279	309
176	190	233	242	274	270	260	232	217	195	177	232	248	289	294	326
185	200	245	254	288	284	273	244	228	205	186	244	261	304	309	343
194	210	267	276	302	298	286	256	239	215	195	256	273	319	324	359
203	220	269	279	316	312	300	267	250	225	204	269	286	333	339	376
212	230	281	292	330	326	313	279	261	235	213	280	299	348	354	393
221	239	292	304	344	340	326	291	272	245	222	292	312	363	369	410
230	249	304	316	358	353	339	303	283	255	232	304	324	378	384	426
239	259	316	329	372	367	353	315	295	265	241	316	337	393	400	443
248	269	328	341	386	381	366	327	306	275	250	328	350	408	415	460

ตาราง แสดงค่า CLF

Table 36. Cooling Load Factors (CLF) for Glass Without Interior Shading ,North Latitude, General

Hr Fenestration Facing	RoomConstruction	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
		N(Shaded)	L	0.17	0.14	0.11	0.09	0.08	0.33	0.42	0.48	0.56	0.63	0.71	0.76	0.80	0.82	0.82	0.79	0.75	0.84	0.61	0.48	0.38	0.31
	M	0.23	0.20	0.18	0.16	0.14	0.34	0.41	0.46	0.53	0.56	0.65	0.70	0.73	0.75	0.76	0.74	0.75	0.79	0.61	0.50	0.42	0.36	0.31	0.27
	H	0.25	0.23	0.21	0.20	0.19	0.38	0.45	0.49	0.55	0.60	0.65	0.69	0.72	0.72	0.72	0.70	0.70	0.75	0.57	0.46	0.39	0.34	0.31	0.28
	L	0.06	0.05	0.04	0.03	0.03	0.26	0.43	0.47	0.44	0.41	0.40	0.39	0.39	0.38	0.36	0.33	0.30	0.26	0.20	0.16	0.13	0.10	0.08	0.07
	M	0.09	0.08	0.07	0.06	0.06	0.24	0.38	0.42	0.39	0.37	0.37	0.36	0.36	0.36	0.34	0.33	0.30	0.27	0.22	0.18	0.16	0.14	0.12	0.10
	H	0.11	0.10	0.09	0.09	0.08	0.26	0.39	0.42	0.39	0.36	0.35	0.34	0.34	0.33	0.32	0.31	0.28	0.25	0.21	0.18	0.16	0.14	0.13	0.12
	L	0.04	0.04	0.03	0.02	0.02	0.23	0.41	0.51	0.51	0.45	0.39	0.36	0.33	0.31	0.28	0.26	0.23	0.19	0.15	0.12	0.10	0.08	0.06	0.05
	M	0.07	0.06	0.06	0.05	0.04	0.21	0.36	0.44	0.45	0.40	0.36	0.33	0.31	0.30	0.28	0.26	0.23	0.21	0.17	0.15	0.13	0.11	0.09	0.08
	H	0.09	0.08	0.08	0.07	0.07	0.23	0.37	0.44	0.44	0.39	0.34	0.31	0.29	0.27	0.26	0.24	0.22	0.20	0.17	0.14	0.13	0.12	0.11	0.10
	L	0.04	0.03	0.03	0.02	0.02	0.21	0.40	0.52	0.57	0.53	0.45	0.39	0.34	0.31	0.28	0.25	0.22	0.18	0.14	0.12	0.09	0.08	0.06	0.05
	M	0.07	0.06	0.05	0.05	0.04	0.20	0.35	0.45	0.49	0.47	0.41	0.36	0.33	0.30	0.28	0.26	0.23	0.20	0.17	0.14	0.12	0.11	0.09	0.08
	H	0.09	0.09	0.08	0.07	0.07	0.22	0.36	0.46	0.49	0.45	0.38	0.33	0.30	0.27	0.25	0.23	0.21	0.19	0.16	0.14	0.13	0.12	0.11	0.10
	L	0.04	0.03	0.03	0.02	0.02	0.19	0.37	0.51	0.57	0.57	0.50	0.42	0.37	0.32	0.29	0.25	0.22	0.19	0.15	0.12	0.10	0.08	0.06	0.05
	M	0.07	0.06	0.06	0.05	0.05	0.18	0.33	0.44	0.50	0.51	0.46	0.39	0.35	0.31	0.29	0.26	0.23	0.21	0.17	0.15	0.13	0.11	0.10	0.08
	H	0.09	0.09	0.08	0.08	0.07	0.20	0.34	0.45	0.49	0.49	0.43	0.36	0.32	0.29	0.26	0.24	0.22	0.19	0.17	0.15	0.13	0.12	0.11	0.10
	L	0.05	0.04	0.03	0.03	0.02	0.17	0.34	0.49	0.58	0.61	0.57	0.48	0.41	0.36	0.32	0.28	0.24	0.20	0.16	0.13	0.10	0.09	0.07	0.06
	M	0.08	0.07	0.06	0.05	0.05	0.16	0.31	0.43	0.51	0.54	0.51	0.44	0.39	0.35	0.32	0.29	0.26	0.22	0.19	0.16	0.14	0.12	0.11	0.09
	H	0.10	0.09	0.09	0.08	0.08	0.19	0.32	0.43	0.50	0.52	0.49	0.41	0.36	0.32	0.29	0.26	0.24	0.21	0.18	0.16	0.14	0.13	0.12	0.11
	L	0.05	0.04	0.04	0.03	0.03	0.13	0.28	0.43	0.55	0.62	0.63	0.57	0.48	0.42	0.37	0.33	0.28	0.24	0.19	0.15	0.12	0.10	0.08	0.07
	M	0.09	0.08	0.07	0.06	0.05	0.14	0.26	0.38	0.48	0.54	0.56	0.51	0.45	0.40	0.36	0.33	0.29	0.25	0.21	0.18	0.16	0.14	0.12	0.10
	H	0.11	0.10	0.10	0.09	0.08	0.17	0.28	0.40	0.49	0.53	0.53	0.48	0.41	0.36	0.33	0.30	0.27	0.24	0.20	0.18	0.16	0.14	0.13	0.12
	L	0.07	0.05	0.04	0.04	0.03	0.06	0.15	0.29	0.43	0.55	0.63	0.64	0.60	0.52	0.45	0.40	0.35	0.29	0.23	0.18	0.15	0.12	0.10	0.08
	M	0.11	0.09	0.08	0.07	0.06	0.08	0.16	0.26	0.38	0.48	0.55	0.57	0.54	0.48	0.43	0.39	0.35	0.30	0.25	0.21	0.18	0.16	0.14	0.12
	H	0.12	0.11	0.11	0.10	0.09	0.12	0.19	0.29	0.40	0.49	0.54	0.55	0.51	0.44	0.39	0.35	0.31	0.27	0.23	0.20	0.18	0.16	0.15	0.13
	L	0.08	0.07	0.05	0.04	0.04	0.06	0.09	0.14	0.22	0.34	0.48	0.59	0.65	0.65	0.59	0.50	0.43	0.36	0.28	0.22	0.18	0.15	0.12	0.10
	M	0.12	0.11	0.09	0.08	0.07	0.08	0.11	0.14	0.21	0.31	0.42	0.52	0.57	0.58	0.53	0.47	0.41	0.36	0.29	0.25	0.21	0.18	0.16	0.14
	H	0.13	0.12	0.12	0.11	0.10	0.11	0.14	0.17	0.24	0.33	0.43	0.51	0.56	0.55	0.50	0.43	0.37	0.32	0.26	0.22	0.20	0.18	0.16	0.15

Table 36 Cooling Load Factors (CLF) for Glass Without Interior Shading, North Latitude, General

Room Construction	Hr Fenestration Facing																									
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
SSW	L	0.10	0.08	0.07	0.06	0.05	0.06	0.09	0.11	0.13	0.15	0.19	0.27	0.39	0.52	0.62	0.67	0.65	0.58	0.46	0.36	0.28	0.23	0.19	0.15	0.12
	M	0.14	0.12	0.11	0.09	0.08	0.09	0.11	0.13	0.15	0.18	0.25	0.35	0.46	0.55	0.59	0.59	0.59	0.53	0.44	0.35	0.30	0.25	0.22	0.19	0.16
	H	0.15	0.14	0.13	0.12	0.11	0.12	0.14	0.16	0.18	0.21	0.27	0.37	0.46	0.53	0.57	0.55	0.49	0.40	0.32	0.26	0.23	0.20	0.18	0.16	0.16
SW	L	0.12	0.10	0.08	0.06	0.05	0.06	0.08	0.10	0.12	0.14	0.16	0.16	0.24	0.36	0.49	0.60	0.66	0.66	0.58	0.43	0.33	0.27	0.22	0.18	0.14
	M	0.15	0.14	0.12	0.10	0.09	0.09	0.10	0.12	0.13	0.15	0.17	0.19	0.23	0.33	0.44	0.53	0.58	0.59	0.53	0.41	0.33	0.28	0.24	0.21	0.18
	H	0.15	0.14	0.13	0.12	0.11	0.12	0.13	0.14	0.16	0.17	0.19	0.25	0.34	0.44	0.52	0.56	0.56	0.49	0.37	0.30	0.25	0.21	0.19	0.17	0.17
WSW	L	0.12	0.10	0.08	0.07	0.05	0.06	0.07	0.09	0.10	0.12	0.13	0.13	0.17	0.26	0.40	0.52	0.62	0.66	0.61	0.44	0.34	0.27	0.22	0.18	0.15
	M	0.15	0.13	0.12	0.10	0.09	0.09	0.10	0.11	0.12	0.13	0.14	0.14	0.17	0.24	0.35	0.46	0.54	0.58	0.55	0.42	0.34	0.28	0.24	0.21	0.18
	H	0.15	0.14	0.13	0.12	0.11	0.11	0.12	0.13	0.14	0.15	0.16	0.16	0.19	0.26	0.36	0.46	0.53	0.56	0.51	0.38	0.30	0.25	0.21	0.19	0.17
W	L	0.12	0.10	0.08	0.06	0.05	0.06	0.07	0.08	0.10	0.11	0.12	0.12	0.14	0.20	0.32	0.45	0.57	0.64	0.61	0.44	0.34	0.27	0.22	0.18	0.14
	M	0.15	0.13	0.11	0.10	0.09	0.09	0.09	0.10	0.11	0.12	0.13	0.13	0.14	0.19	0.29	0.40	0.50	0.56	0.55	0.41	0.33	0.27	0.23	0.20	0.17
	H	0.14	0.13	0.12	0.11	0.10	0.11	0.12	0.13	0.14	0.15	0.16	0.16	0.17	0.18	0.25	0.36	0.46	0.53	0.52	0.38	0.30	0.24	0.20	0.18	0.16
WNW	L	0.12	0.10	0.08	0.06	0.05	0.06	0.07	0.09	0.10	0.13	0.13	0.13	0.15	0.17	0.26	0.40	0.53	0.63	0.62	0.44	0.34	0.27	0.22	0.18	0.14
	M	0.15	0.13	0.11	0.10	0.09	0.09	0.10	0.11	0.12	0.13	0.14	0.14	0.15	0.17	0.24	0.35	0.47	0.55	0.55	0.41	0.33	0.27	0.23	0.20	0.17
	H	0.14	0.13	0.12	0.11	0.10	0.11	0.12	0.13	0.14	0.15	0.16	0.16	0.17	0.18	0.25	0.36	0.46	0.53	0.52	0.38	0.30	0.24	0.20	0.18	0.16
NW	L	0.11	0.09	0.08	0.06	0.05	0.06	0.08	0.10	0.12	0.14	0.15	0.16	0.17	0.18	0.25	0.36	0.46	0.53	0.52	0.38	0.30	0.24	0.20	0.18	0.16
	M	0.14	0.12	0.11	0.09	0.08	0.09	0.10	0.11	0.13	0.14	0.16	0.16	0.17	0.18	0.21	0.30	0.42	0.51	0.54	0.39	0.32	0.26	0.22	0.19	0.16
	H	0.14	0.13	0.12	0.11	0.10	0.12	0.15	0.17	0.20	0.23	0.25	0.26	0.26	0.28	0.28	0.31	0.38	0.49	0.53	0.38	0.30	0.25	0.21	0.18	0.16
NNW	L	0.12	0.09	0.08	0.06	0.05	0.07	0.11	0.14	0.18	0.22	0.25	0.25	0.27	0.29	0.30	0.33	0.44	0.57	0.62	0.44	0.33	0.26	0.21	0.17	0.14
	M	0.15	0.13	0.11	0.10	0.09	0.10	0.12	0.15	0.18	0.21	0.23	0.25	0.26	0.27	0.28	0.31	0.39	0.51	0.56	0.41	0.33	0.27	0.23	0.20	0.17
	H	0.14	0.13	0.12	0.11	0.10	0.12	0.15	0.17	0.20	0.23	0.25	0.26	0.26	0.28	0.28	0.31	0.38	0.49	0.53	0.38	0.30	0.25	0.21	0.18	0.16
Hor	L	0.11	0.09	0.07	0.06	0.05	0.07	0.14	0.24	0.36	0.48	0.58	0.66	0.66	0.72	0.74	0.73	0.67	0.59	0.47	0.37	0.03	0.24	0.19	0.16	0.13
	M	0.16	0.14	0.12	0.11	0.09	0.11	0.16	0.24	0.33	0.43	0.52	0.59	0.59	0.64	0.67	0.66	0.62	0.56	0.47	0.38	0.32	0.28	0.24	0.21	0.18
	H	0.17	0.16	0.15	0.14	0.13	0.15	0.20	0.28	0.36	0.45	0.52	0.59	0.59	0.62	0.64	0.62	0.58	0.51	0.42	0.35	0.29	0.26	0.23	0.21	0.19

ตาราง แสดงค่า SHGF ละติจูดที่ 16 °

SHGF 16 N Lat	N	NE	E	SE	S	SW	W	NW	Hor
Jan	30	55	210	251	199	251	210	55	248
Feb	33	96	231	233	154	233	231	96	275
Mar	35	140	239	197	93	197	239	140	291
Apr	39	172	227	150	45	150	227	172	289
May	52	189	215	115	41	115	215	189	282
June	66	194	207	99	41	99	207	194	277
July	55	187	210	111	42	111	210	187	277
Aug	41	168	219	143	46	143	219	168	282
Sep	36	134	227	191	93	191	227	134	282
Oct	33	95	223	225	150	225	223	95	270
Nov	30	55	206	247	196	247	206	55	246
Dec	29	41	198	254	212	254	198	41	234

ศูนย์วิทยทรัพยากร
จุฬาลงกรณ์มหาวิทยาลัย

ค่า CLF x SHGF

Time	N(Shaded)			NE			E			ESE			SE								
	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H						
1	5.10	6.90	7.50	1.80	2.70	3.30	2.20	3.85	4.95	5.88	10.29	13.23	8.40	14.70	18.90	12.20	19.52	24.40	12.55	22.59	27.61
2	4.20	6.00	6.90	1.50	2.40	3.00	2.20	3.30	4.40	4.41	8.82	13.23	6.30	12.60	18.90	9.76	17.08	21.96	10.04	20.08	25.10
3	3.30	5.40	6.30	1.20	2.10	2.70	1.65	3.30	4.40	4.41	7.35	11.76	6.30	12.60	16.80	7.32	14.64	21.96	10.04	17.57	25.10
4	2.70	4.80	6.00	0.90	1.80	2.70	1.10	2.75	3.85	2.94	7.35	10.29	4.20	10.50	16.80	7.32	12.20	19.52	7.53	15.06	22.59
5	2.40	4.20	5.70	0.90	1.80	2.40	1.10	2.20	3.85	2.94	5.88	10.29	4.20	10.50	14.70	4.88	12.20	19.52	7.53	12.55	20.08
6	9.90	10.20	11.40	7.80	7.20	7.80	12.65	11.55	12.65	30.87	29.40	32.34	39.90	37.80	42.00	41.48	39.04	46.36	32.63	35.14	42.67
7	12.60	12.30	13.50	12.90	11.40	11.70	22.55	19.80	20.35	58.80	51.45	52.92	77.70	69.30	71.40	82.96	75.64	78.08	70.28	65.26	70.28
8	14.40	13.80	14.70	14.10	12.60	12.60	28.05	24.20	24.20	76.44	66.15	67.62	107.10	92.40	94.50	119.56	104.92	104.92	107.93	95.38	100.40
9	16.80	15.90	16.50	13.20	11.70	11.70	28.05	24.75	24.20	83.79	72.03	72.03	119.70	105.00	102.90	141.52	124.44	122.00	138.05	120.48	122.99
10	18.90	16.80	18.00	12.30	11.10	10.80	24.75	22.00	21.45	77.91	69.09	66.15	119.70	107.10	102.90	148.84	131.76	126.88	155.62	135.54	133.03
11	21.30	19.50	19.50	12.00	11.10	10.50	21.45	19.80	18.70	66.15	60.27	55.86	105.00	96.60	90.30	139.08	124.44	119.56	158.13	140.56	133.03
12	22.80	21.00	20.70	11.70	10.80	10.20	19.80	18.15	17.05	57.33	52.92	48.51	88.20	81.90	75.60	117.12	107.36	100.04	143.07	128.01	120.48
13	24.00	21.90	21.60	11.70	10.80	10.20	18.15	17.05	15.95	49.86	48.51	44.10	77.70	73.50	67.20	100.04	95.16	87.84	120.48	112.95	102.91
14	24.80	22.50	21.60	11.40	10.80	9.90	17.05	16.50	14.85	45.57	44.10	39.69	67.20	65.10	60.90	87.84	85.40	78.08	105.42	100.40	90.36
15	24.60	22.80	21.60	10.80	10.20	9.60	15.40	15.40	14.30	41.16	41.16	36.75	60.90	60.90	54.60	78.08	78.08	70.76	92.87	90.36	82.83
16	23.70	22.20	21.00	9.90	9.90	9.30	14.30	14.30	13.20	36.75	38.22	33.81	52.50	54.60	50.40	68.32	70.76	63.44	82.83	82.83	75.30
17	22.50	22.50	21.00	9.00	9.00	8.40	12.65	12.65	12.10	32.34	33.81	30.87	46.20	48.30	46.20	58.56	63.44	58.56	70.28	72.79	67.77
18	25.20	23.70	22.50	7.80	8.10	7.50	10.45	11.55	11.00	26.46	29.40	27.93	39.90	44.10	39.90	48.80	53.68	51.24	60.24	62.75	60.24
19	18.30	18.30	17.10	6.00	6.60	6.30	8.25	9.35	9.35	20.58	24.99	23.52	31.50	35.70	35.70	39.04	46.36	43.92	47.69	52.71	50.20
20	14.40	15.00	13.80	4.80	5.40	5.40	6.60	8.25	7.70	17.64	20.58	20.58	25.20	31.50	31.50	31.72	39.04	39.04	37.65	45.18	45.18
21	11.40	12.60	11.70	3.90	4.80	4.80	5.50	7.15	7.15	13.23	17.64	19.11	21.00	27.30	27.30	24.40	34.16	34.16	30.12	40.16	40.16
22	9.30	10.80	10.20	3.00	4.20	4.20	4.40	6.05	6.60	11.76	16.17	17.64	16.80	23.10	25.20	21.96	29.28	31.72	25.10	35.14	35.14
23	7.50	9.30	9.30	2.40	3.60	3.90	3.30	4.95	6.05	8.82	13.23	16.17	12.60	21.00	23.10	17.08	26.84	29.28	20.08	30.12	32.63
24	6.00	8.10	8.40	2.10	3.00	3.60	2.75	4.40	5.50	7.35	11.76	14.70	10.50	16.80	21.00	14.64	21.96	26.84	17.57	25.10	30.12

SSE			S			SSW			SW			WSW			W			WSW			W					
L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H			
15.81	24.53	26.76	15.92	23.88	25.87	22.30	31.22	33.45	30.12	37.65	37.65	29.28	36.60	36.60	25.20	31.50	29.40	17.84	22.05	20.58	6.05	7.70	7.70	3.60	4.50	4.20
11.15	20.07	24.53	13.93	21.89	23.88	17.84	26.76	31.22	25.10	35.14	35.14	24.40	31.72	34.16	21.00	27.30	27.30	14.70	19.11	19.11	4.95	6.60	7.15	2.70	3.90	3.90
8.92	17.84	24.53	9.95	17.91	23.88	15.81	24.53	28.99	20.08	30.12	32.63	19.52	29.28	31.72	16.80	23.10	25.20	11.76	16.17	17.64	4.40	6.05	6.60	2.40	3.30	3.60
8.92	15.61	22.30	7.96	15.92	21.89	13.38	20.07	26.76	15.06	25.10	30.12	17.08	24.40	29.28	12.60	21.00	23.10	8.82	14.70	16.17	3.30	4.95	6.05	1.80	3.00	3.30
6.69	13.38	20.07	7.96	13.93	19.90	11.15	17.84	24.53	12.55	22.59	27.61	12.20	21.96	26.84	10.50	18.90	21.00	7.35	13.23	14.70	2.75	4.40	5.50	1.50	2.70	3.00
13.38	17.84	26.76	11.94	15.92	21.89	13.38	20.07	26.76	150.80	22.59	30.12	14.64	21.96	26.84	12.60	18.90	23.10	8.82	13.23	16.17	3.30	4.95	6.60	2.10	3.00	3.60
33.45	35.68	42.37	17.91	21.89	27.86	20.07	24.53	31.22	20.08	25.10	32.63	17.08	24.40	29.28	14.70	18.90	25.20	10.29	14.70	17.64	4.40	5.50	8.25	3.30	3.60	4.50
64.67	57.98	64.67	27.86	27.86	33.83	24.53	28.99	35.68	25.10	30.12	35.14	21.96	26.84	31.72	16.80	21.00	27.30	13.23	16.17	19.11	5.50	6.05	9.35	4.20	4.50	5.10
95.89	84.74	89.20	43.78	41.79	47.76	33.45	33.45	40.14	30.12	32.63	40.16	24.40	29.28	34.16	21.00	23.10	29.40	14.70	17.64	20.58	6.60	7.15	11.00	5.40	5.40	6.00
122.65	107.04	109.27	67.66	61.69	65.67	42.37	40.14	46.83	35.14	37.65	42.67	29.28	31.72	36.60	23.10	25.20	31.50	19.11	19.11	22.05	7.70	7.70	12.65	6.60	6.30	6.90
140.49	122.65	120.42	95.52	83.58	85.57	60.21	55.75	60.21	40.18	42.67	47.69	31.72	34.16	39.04	25.20	27.30	33.60	19.11	20.58	23.52	8.80	8.80	13.75	7.50	6.90	7.50
142.72	127.11	122.65	117.41	103.48	101.49	86.97	78.05	82.51	60.24	57.73	62.75	41.48	41.48	46.36	29.40	29.40	35.70	22.05	22.05	24.99	9.35	9.35	14.30	8.10	7.80	7.80
133.80	120.42	113.73	129.35	113.43	111.44	115.96	102.58	102.58	90.36	82.83	85.34	63.44	58.56	63.44	42.00	39.90	37.80	24.99	24.99	26.46	10.45	9.90	15.40	8.70	8.10	8.40
115.96	107.04	98.12	129.35	115.42	109.45	138.28	122.65	118.19	122.99	110.44	110.44	97.80	85.40	87.84	87.20	60.90	52.50	38.22	35.28	36.75	12.65	11.55	15.40	9.00	8.40	8.40
100.35	95.89	86.97	117.41	105.47	99.50	149.41	131.57	127.11	150.60	133.03	130.52	126.88	112.24	112.24	94.50	84.00	75.60	58.80	51.45	52.92	18.15	16.50	17.05	9.90	9.30	9.30
89.20	86.97	78.05	99.50	93.53	85.57	144.95	131.57	122.65	165.66	145.58	140.56	151.28	131.76	129.32	119.70	105.00	96.60	77.91	69.09	67.62	25.85	23.10	20.90	13.20	11.70	11.40
78.05	78.05	69.13	85.57	81.59	73.63	129.34	118.19	109.27	165.66	148.09	140.56	161.04	141.52	136.64	134.40	117.60	111.30	92.61	80.85	77.91	32.45	28.05	26.95	17.10	15.30	14.70
64.67	66.90	60.21	71.64	71.64	63.68	102.58	98.12	89.20	145.58	133.03	122.99	148.84	134.20	124.44	128.10	115.50	109.20	91.14	80.85	76.44	33.00	29.70	29.15	18.60	16.80	15.90
51.29	55.75	51.29	55.72	57.71	51.74	80.28	78.05	71.36	107.93	102.91	92.87	107.36	102.48	92.72	92.40	86.10	79.80	64.68	60.27	55.86	23.10	21.45	20.90	13.20	12.30	11.40
40.14	46.83	44.90	43.78	49.75	43.78	62.44	66.90	57.98	82.83	82.83	75.30	82.96	82.96	73.20	71.40	69.30	63.00	49.98	48.51	44.10	18.15	17.60	16.50	9.90	9.90	9.00
33.45	40.14	40.14	35.82	41.79	39.80	51.29	55.75	51.29	67.77	70.28	62.75	65.88	68.32	61.00	56.70	56.70	50.40	39.69	39.69	35.28	14.30	14.30	13.75	7.80	8.10	7.50
26.76	35.68	35.68	29.85	35.82	35.82	42.37	49.06	44.60	55.22	60.24	52.71	53.68	58.56	51.24	56.70	48.30	42.00	32.34	33.81	29.40	11.55	12.10	11.55	6.30	6.90	6.30
22.30	31.22	33.45	23.88	31.84	31.84	33.45	42.37	40.14	45.18	52.71	47.69	43.92	51.24	46.36	37.80	42.00	37.80	26.46	29.40	26.46	9.35	10.45	9.90	5.10	6.00	5.40
17.84	26.76	28.99	19.90	27.86	29.85	26.76	35.68	35.68	35.14	45.18	42.67	36.60	43.92	41.48	29.40	35.70	33.60	20.58	24.99	23.52	7.70	8.80	8.80	4.20	5.10	4.80

1	5.61	7.59	8.25	1.98	2.97	3.63	3.84	3.85	4.95	7.20	12.60	16.20	9.24	16.17	20.79	12.35	19.76	24.70	11.65	20.97	25.63
2	4.62	6.60	7.59	1.65	2.64	3.30	3.84	3.30	4.40	5.40	10.80	16.20	6.93	13.86	20.79	9.88	17.29	22.23	9.32	18.64	23.30
3	3.63	5.94	6.93	1.32	2.31	2.97	2.88	3.30	4.40	5.40	9.00	14.40	6.93	13.86	18.48	7.41	14.82	22.23	9.32	16.31	23.30
4	2.97	5.28	6.60	0.99	1.98	2.97	1.92	2.75	3.85	3.80	9.00	12.60	4.62	11.55	18.48	7.41	12.35	19.76	6.99	13.98	20.97
5	2.64	4.62	6.27	0.99	1.98	2.64	1.92	2.20	3.85	3.80	7.20	12.60	4.62	11.55	16.17	4.94	12.35	19.76	6.99	11.65	18.64
6	10.89	11.22	12.54	8.58	7.92	8.58	22.08	11.55	12.65	37.80	36.00	39.60	43.89	41.58	46.20	41.99	39.52	46.93	30.29	32.62	39.61
7	13.86	13.53	14.85	14.19	12.54	12.87	39.36	19.80	20.35	72.00	63.00	64.80	85.47	76.23	78.54	83.98	76.57	79.04	65.24	60.58	65.24
8	15.84	15.18	16.17	15.51	13.86	13.86	48.96	24.20	24.20	93.60	81.00	82.80	117.81	101.64	103.95	121.03	106.21	106.21	100.19	88.54	93.20
9	18.48	17.49	18.15	14.52	12.87	12.87	48.96	24.75	24.20	102.60	88.20	88.20	131.67	115.50	113.19	143.26	125.97	123.50	128.15	111.84	114.17
10	20.79	18.48	19.80	13.53	12.21	11.88	43.20	22.00	21.45	95.40	84.60	81.00	131.67	117.81	113.19	150.67	133.38	128.44	144.46	125.82	123.49
11	23.43	21.45	21.45	13.20	12.21	11.55	37.44	19.80	18.70	81.00	73.80	68.40	115.50	106.26	99.33	140.79	125.97	121.03	146.79	130.48	123.49
12	25.08	23.10	22.77	12.87	11.88	11.22	34.56	18.15	17.05	70.20	64.80	59.40	97.02	90.09	83.16	118.56	108.68	101.27	132.81	118.83	111.84
13	26.40	24.09	23.76	12.87	11.88	11.22	31.68	17.05	15.95	61.20	59.40	54.00	85.47	80.85	73.92	101.27	96.33	88.92	111.84	104.85	95.53
14	27.06	24.75	23.76	12.54	11.88	10.89	29.76	16.50	14.85	55.80	54.00	48.60	73.92	71.61	66.99	88.92	86.45	79.04	97.86	93.20	83.88
15	27.06	25.08	23.76	11.88	11.22	10.56	26.88	15.40	14.30	50.40	50.40	45.00	66.99	66.99	60.06	79.04	79.04	71.63	86.21	83.88	76.89
16	26.07	24.42	23.10	10.89	10.89	10.23	24.96	14.30	13.20	45.00	46.80	41.40	57.75	60.06	55.44	69.16	71.63	64.22	76.89	76.89	69.90
17	24.75	24.75	23.10	9.90	9.90	9.24	22.08	12.65	12.10	39.60	41.40	37.80	50.82	53.13	50.82	59.28	64.22	59.28	65.24	67.57	62.91
18	27.72	26.07	24.75	8.58	8.91	8.25	18.24	11.55	11.00	32.40	36.00	34.20	43.89	48.51	43.89	49.40	54.34	51.87	55.92	58.25	55.92
19	20.13	20.13	18.81	6.60	7.26	6.93	14.40	9.35	9.35	25.20	30.60	28.80	34.65	39.27	39.27	39.52	46.93	44.46	44.27	48.93	46.60
20	15.84	16.90	15.18	5.28	5.94	5.94	11.52	8.25	7.70	21.60	25.20	25.20	27.72	34.65	34.65	32.11	39.52	39.52	34.95	41.94	41.94
21	12.54	13.86	12.87	4.29	5.28	5.28	9.60	7.15	7.15	16.20	21.60	23.40	23.10	30.03	30.03	24.70	34.58	34.58	27.96	37.28	37.28
22	10.23	11.88	11.22	3.30	4.62	4.62	7.68	6.05	6.60	14.40	19.80	21.60	18.48	25.41	27.72	22.23	29.64	32.11	23.30	32.62	32.62
23	8.25	10.23	10.23	2.64	3.96	4.29	5.76	4.95	6.05	10.80	16.20	19.80	13.86	23.10	25.41	17.29	27.17	29.64	18.64	27.96	30.29
24	6.60	8.91	9.24	2.31	3.30	3.96	4.80	4.40	5.50	9.00	14.40	18.00	11.55	18.48	23.10	14.82	22.23	27.17	16.31	23.30	27.96

13.16	20.68	22.56	12.32	18.48	20.02	18.80	26.32	28.20	27.96	34.95	34.95	29.64	37.05	37.05	27.72	34.65	32.34	21.60	27.00	25.20	10.56	7.70	7.70	3.96	4.95	4.62
9.40	16.92	20.68	10.78	16.94	18.48	15.04	22.56	26.32	23.30	32.62	32.62	24.70	32.11	34.58	23.10	30.03	30.03	18.00	23.40	23.40	8.64	6.60	7.15	2.97	4.29	4.29
7.52	15.04	20.68	7.70	13.86	18.48	13.16	20.68	24.44	18.64	27.96	30.29	19.76	29.64	32.11	18.48	25.41	27.72	14.40	19.80	21.60	7.68	6.05	6.60	2.64	3.63	3.96
5.64	11.28	16.92	6.16	12.32	16.94	11.28	16.92	22.56	13.98	23.30	27.96	17.29	24.70	29.64	13.86	23.10	25.41	10.80	18.00	19.80	5.76	4.95	6.05	1.98	3.30	3.63
11.28	15.04	22.56	9.24	12.32	16.94	11.28	16.92	22.56	11.65	20.97	25.63	12.35	22.23	27.17	11.55	20.79	23.10	9.00	16.20	18.00	4.80	4.40	5.50	1.65	2.97	3.30
28.20	30.08	35.72	13.86	16.94	21.56	16.92	20.68	26.32	18.64	23.30	30.29	17.29	24.70	29.64	16.17	20.79	27.72	12.60	19.80	21.60	7.68	5.50	8.25	3.63	3.96	4.95
54.52	48.88	54.52	21.56	21.56	26.18	20.68	24.44	30.08	23.30	27.96	32.62	22.23	27.17	32.11	18.48	23.10	30.03	16.20	19.80	23.40	9.60	6.05	9.35	4.62	4.95	5.61
80.84	71.44	75.20	33.88	32.34	36.96	28.20	28.20	33.84	27.96	30.29	37.28	24.70	29.64	34.58	23.10	25.41	32.34	18.00	21.60	25.20	11.52	7.15	11.00	5.94	5.94	6.60
103.40	90.24	92.12	52.36	47.74	50.82	35.72	33.84	39.48	32.62	34.95	39.61	29.64	32.11	37.05	25.41	27.72	34.65	23.40	23.40	27.00	13.44	7.70	12.65	7.26	6.93	7.59
118.44	103.40	101.52	73.92	64.68	66.22	50.76	47.00	50.76	37.28	39.61	44.27	32.11	34.58	39.52	27.72	30.03	36.96	23.40	25.20	28.80	15.36	8.80	13.75	8.25	7.59	8.25
120.32	107.16	103.40	90.86	80.08	78.54	73.32	65.80	69.56	55.92	53.59	58.25	41.99	41.99	46.93	32.34	32.34	38.27	27.00	27.00	30.60	16.32	9.35	14.30	8.91	8.58	8.58
112.80	101.52	95.88	100.10	87.78	86.24	97.76	86.48	86.48	83.88	76.89	79.22	64.22	59.28	64.22	46.20	43.89	41.58	30.80	30.60	32.40	18.24	9.90	15.40	9.57	8.91	9.24
97.76	90.24	82.72	100.10	89.32	84.70	116.56	103.40	99.64	114.17	102.52	102.52	98.80	86.45	88.92	73.92	66.99	57.75	46.80	43.20	45.00	22.08	11.55	15.40	9.90	9.24	9.24
84.80	80.84	73.32	90.86	81.62	77.00	125.96	110.92	107.16	139.80	123.49	121.16	128.44	113.62	113.62	103.95	92.40	83.16	72.00	63.00	64.80	31.68	16.50	17.05	10.89	10.23	10.23
75.20	73.32	65.80	77.00	72.38	66.22	122.20	110.92	103.40	153.78	135.14	130.48	153.14	133.38	130.91	131.67	115.50	106.26	95.40	84.60	82.80	45.12	23.10	20.90	14.52	12.87	12.54
65.80	65.80	58.28	66.22	63.14	58.96	109.04	99.64	92.12	153.78	137.47	130.48	163.02	143.26	138.32	147.84	129.36	122.43	113.40	99.00	95.40	56.64	28.05	26.95	18.81	16.83	16.17
54.52	56.40	50.76	55.44	55.44	49.28	86.48	82.72	75.20	135.14	123.49	114.17	150.67	135.85	125.97	140.91	127.05	120.12	111.60	99.00	93.60	57.60	29.70	29.15	20.46	18.48	17.49
43.24	47.00	43.24	43.12	44.66	40.04	67.68	65.60	60.16	100.19	95.53	86.21	108.68	103.74	93.86	101.64	94.71	87.78	79.20	73.80	68.40	40.32	21.45	20.90	14.52	13.53	12.54
33.84	39.48	37.60	33.88	38.50	33.88	52.64	56.40	48.88	76.89	76.89	69.90	83.98	83.98	74.10	78.54	76.23	69.30	61.20	59.40	54.00	31.68	17.00	16.50	10.89	10.89	9.90
28.20	33.84	33.84	27.72	32.34	30.80	43.24	47.00	43.24	62.91	65.24	58.25	66.69	69.16	61.75	62.37	62.37	55.44	48.80	48.60	43.20	24.96	14.30	13.75	8.58	8.91	8.25
22.56	30.08	30.08	23.10	27.72	27.72	35.72	41.36	37.60	51.28	55.92	48.93	54.34	59.28	51.87	62.37	53.13	46.20	39.60	41.40	36.00	20.16	12.10	11.55	6.93	7.59	6.93
18.80	26.32	28.20	18.48	24.64	24.64	28.20	35.72	33.84	41.94	48.93	44.27	44.48	51.87	46.93	41.58	46.20	41.58	32.40	35.00	32.40	16.32	10.45	9.90	5.61	6.60	5.94
15.04	22.56	24.44	15.40	21.56	23.10	22.56	30.08	30.08	32.82	41.94	39.61	37.05	44.46	41.99	32.34	38.27	36.96	25.20	30.60	28.80	13.44	8.80	8.80	4.62	5.61	5.28

1	5.95	8.05	8.75	3.18	4.77	5.83	5.60	9.80	12.60	8.20	14.35	18.45	9.56	16.73	21.51	11.75	18.80	23.50	9.85	17.73	21.67
2	4.90	7.00	8.05	2.65	4.24	5.30	5.60	8.40	11.20	6.15	12.30	18.45	7.17	14.34	21.51	9.40	16.45	21.15	7.88	15.78	19.70
3	3.85	6.30	7.35	2.12	3.71	4.77	4.20	8.40	11.20	6.15	10.25	18.40	7.17	14.34	19.12	7.05	14.10	21.15	5.88	13.79	19.70
4	3.15	5.60	7.00	1.59	3.18	4.77	2.80	7.00	9.80	4.10	10.25	14.35	4.78	11.95	19.12	7.05	11.75	18.80	5.91	11.82	17.73
5	2.80	4.90	6.65	1.59	3.18	4.24	2.80	5.60	9.80	4.10	8.20	14.35	4.78	11.95	16.73	4.70	11.75	18.80	5.91	9.85	15.76
6	11.55	11.90	13.30	13.78	12.72	13.78	32.20	28.40	32.20	43.05	41.00	45.10	45.41	43.02	47.80	39.95	37.60	44.65	25.61	27.58	33.49
7	14.70	14.35	15.75	22.79	20.14	20.67	57.40	50.40	51.80	82.00	71.75	73.80	88.43	78.87	81.28	79.90	72.85	75.20	55.16	51.22	55.16
8	16.80	16.10	17.15	24.91	22.26	22.26	71.40	61.60	61.60	106.60	92.25	94.30	121.89	105.16	107.55	115.15	101.05	101.05	84.71	74.86	78.80
9	19.60	18.55	19.25	23.32	20.67	20.67	71.40	63.00	61.60	116.85	100.45	100.45	136.23	119.50	117.11	136.30	119.85	117.50	108.35	94.56	96.53
10	22.05	19.60	21.00	21.73	19.61	19.08	63.00	56.00	54.60	108.65	96.35	92.25	136.23	121.89	117.11	143.35	126.90	122.20	122.14	106.38	104.41
11	24.85	22.75	22.75	21.20	19.61	18.55	54.60	50.40	47.60	92.25	84.05	77.90	119.50	109.94	102.77	133.95	119.85	115.15	124.11	110.32	104.41
12	26.60	24.50	24.15	20.67	19.08	18.02	50.40	46.20	43.40	79.95	73.80	67.65	100.38	93.21	86.04	112.80	103.40	96.35	112.29	100.47	94.56
13	28.00	25.55	25.20	20.67	19.08	18.02	46.20	43.40	40.60	69.70	67.65	61.50	88.43	83.65	78.48	96.35	91.65	84.60	94.56	88.65	80.77
14	28.70	26.25	25.20	20.14	19.08	17.49	43.40	42.00	37.80	63.55	61.50	55.35	76.48	74.09	69.31	84.60	82.25	75.20	82.74	78.80	70.92
15	28.70	26.60	25.20	19.08	18.02	16.96	39.20	39.20	36.40	57.40	57.40	51.25	69.31	69.31	62.14	75.20	75.20	68.15	72.89	70.92	65.01
16	27.65	25.90	24.50	17.49	17.49	16.43	36.40	36.40	33.60	51.25	53.30	47.15	59.75	62.14	57.36	65.80	68.15	61.10	65.01	65.01	59.10
17	26.25	26.25	24.50	15.90	15.90	14.84	32.20	32.20	30.80	45.10	47.15	43.05	52.58	54.97	52.58	56.40	61.10	56.40	55.16	57.13	53.19
18	29.40	27.65	26.25	13.78	14.31	13.25	26.60	29.40	28.00	36.90	41.00	38.95	45.41	50.19	45.41	47.00	51.70	49.35	47.28	49.25	47.28
19	21.35	21.35	19.95	10.60	11.66	11.13	21.00	23.80	23.80	28.70	34.85	32.80	35.85	40.63	40.63	37.60	44.65	42.30	37.43	41.37	39.40
20	16.80	17.50	16.10	8.48	9.54	9.54	16.80	21.00	19.60	24.60	28.70	28.70	28.68	35.85	35.85	30.55	37.60	37.60	29.55	35.46	35.46
21	13.30	14.70	13.65	6.89	8.48	8.48	14.00	18.20	18.20	18.45	24.60	26.65	23.90	31.07	31.07	23.50	32.90	32.90	23.64	31.52	31.52
22	10.85	12.60	11.90	5.30	7.42	7.42	11.20	15.40	16.80	16.40	22.55	24.60	19.12	26.29	26.68	21.15	28.20	30.55	19.70	27.58	27.58
23	8.75	10.85	10.85	4.24	6.36	6.89	8.40	12.60	15.40	12.30	18.45	22.55	14.34	23.90	26.29	16.45	25.85	28.20	15.76	23.64	25.61
24	7.00	9.45	9.80	3.71	5.30	6.36	7.00	11.20	14.00	10.25	16.40	20.50	11.95	19.12	23.90	14.10	21.15	25.85	13.79	19.70	23.64



9.66	15.18	16.56	7.44	11.16	12.09	13.80	19.32	20.70	23.64	29.55	29.55	28.20	35.25	35.25	28.68	35.85	33.46	24.60	30.75	28.70	15.40	19.60	19.60	6.36	7.95	7.42
6.90	12.42	15.18	6.51	10.23	11.16	11.04	16.56	19.32	19.70	27.58	27.58	23.50	30.55	32.90	23.90	31.07	31.07	20.50	26.65	26.65	12.60	16.80	18.20	4.77	6.89	6.89
5.52	11.04	15.18	4.65	8.37	11.16	9.66	15.18	17.94	15.76	23.64	25.61	18.80	28.20	30.55	19.12	26.29	28.68	16.40	22.55	24.60	11.20	15.40	16.80	4.24	5.83	6.36
5.52	9.66	13.80	3.72	7.44	10.23	8.28	12.42	16.56	11.82	19.70	23.64	16.45	23.50	28.20	14.34	23.90	26.29	12.30	20.50	22.55	8.40	12.60	15.40	3.18	5.30	5.83
4.14	8.28	12.42	3.72	6.51	9.30	6.90	11.04	15.18	9.85	17.73	21.67	11.75	21.15	25.85	11.95	21.51	23.90	10.25	16.45	20.50	7.00	11.20	14.00	2.65	4.77	5.30
8.28	11.04	16.56	5.58	7.44	10.23	8.28	12.42	16.56	118.20	17.73	23.64	14.10	21.15	25.85	14.34	21.51	26.29	12.30	16.45	22.55	8.40	12.60	16.80	3.71	5.30	6.36
20.70	22.08	26.22	8.37	10.23	13.02	12.42	15.18	19.32	15.76	19.70	25.61	16.45	23.50	28.20	16.73	21.51	28.68	14.36	20.50	24.60	11.20	14.00	21.00	5.83	6.36	7.95
40.02	35.88	40.02	13.02	13.02	15.81	15.18	17.94	22.08	19.70	23.64	27.58	21.15	25.85	30.55	19.12	23.90	31.07	18.45	22.55	26.65	14.00	15.40	23.80	7.42	7.95	9.01
59.34	52.44	55.20	20.46	19.53	22.32	20.70	20.70	24.84	23.64	25.61	31.52	23.50	28.20	32.90	23.90	26.29	33.46	20.50	24.60	28.70	16.80	18.20	28.00	9.54	9.54	10.60
75.90	66.24	67.62	31.62	28.83	30.69	26.22	24.84	28.98	27.58	29.55	33.49	28.20	30.55	35.25	26.29	28.68	35.85	26.65	26.65	30.75	19.60	19.60	32.20	11.96	11.13	12.19
86.94	75.90	74.52	44.64	39.06	39.99	37.26	34.50	37.26	31.52	33.49	37.43	30.55	32.90	37.60	28.68	31.07	38.24	26.65	28.70	32.90	22.40	22.40	35.00	13.25	12.19	13.25
88.32	78.66	75.90	54.87	48.36	47.43	53.82	46.30	51.06	47.28	45.31	49.25	39.95	39.95	44.65	33.46	33.46	40.63	30.75	30.75	34.85	23.80	23.80	36.40	14.31	13.78	13.78
82.80	74.52	70.38	60.45	53.01	52.08	71.76	63.48	63.48	70.92	65.01	66.98	61.10	56.40	61.10	47.80	45.41	43.02	34.85	34.85	36.90	26.60	25.20	39.20	15.37	14.31	14.84
71.76	66.24	60.72	60.45	53.94	51.15	85.56	75.90	73.14	96.53	86.66	86.66	94.00	82.25	84.65	76.48	69.31	59.75	53.30	49.20	51.25	32.20	29.40	39.20	15.90	14.84	14.84
62.10	59.34	53.82	54.87	49.29	46.50	92.46	81.42	78.66	118.20	104.41	102.44	122.20	108.10	108.10	107.55	95.60	86.04	82.00	71.75	73.80	46.20	42.00	43.40	17.49	16.43	16.43
55.20	53.82	48.30	46.50	43.71	39.99	86.70	81.42	75.90	130.02	114.28	110.32	145.70	126.90	124.55	136.23	119.50	109.94	106.65	96.35	94.30	65.80	58.80	53.20	23.32	20.67	20.14
48.30	48.30	42.78	39.99	38.13	34.41	60.04	73.14	67.62	130.02	116.23	110.32	155.10	136.30	131.60	152.96	133.84	126.67	129.15	112.75	108.65	82.60	71.40	68.60	30.21	27.03	25.97
40.02	41.40	37.26	33.48	33.48	29.78	63.48	60.72	55.20	114.28	104.41	96.53	143.35	129.25	119.85	145.79	131.45	124.28	127.10	112.75	106.60	84.00	75.60	74.20	32.86	29.68	28.09
31.74	34.50	31.74	26.04	26.97	24.18	49.68	46.30	44.16	84.71	80.77	72.89	103.40	96.70	89.30	105.16	97.99	90.82	90.20	84.05	77.90	58.80	54.60	53.20	23.32	21.73	20.14
24.84	28.98	27.60	20.46	23.25	20.46	38.64	41.40	35.88	65.01	65.01	59.10	79.90	78.90	70.50	81.26	78.87	71.70	69.70	67.65	61.50	46.20	44.80	42.00	17.49	17.49	15.90
20.70	24.84	24.84	16.74	19.53	18.60	31.74	34.50	31.74	53.19	55.16	49.25	83.45	65.80	58.75	64.53	64.53	57.36	55.35	55.35	49.20	36.40	36.40	35.00	13.78	14.31	13.25
18.56	22.08	22.08	13.95	16.74	16.74	26.22	30.36	27.60	43.34	47.28	41.37	51.70	56.40	49.35	64.53	54.97	47.80	45.10	47.15	41.00	29.40	30.80	29.40	11.13	12.19	11.13
13.80	19.32	20.70	11.16	14.88	14.88	20.70	26.22	24.84	35.46	41.37	37.43	42.30	49.35	44.65	43.02	47.80	43.02	36.90	41.00	36.90	23.80	26.60	25.20	9.01	10.60	9.54
11.04	16.56	17.94	9.30	13.02	13.95	16.56	22.08	22.08	27.58	35.46	33.49	35.25	42.30	38.95	33.46	40.63	38.24	28.70	34.85	32.80	19.80	22.40	22.40	7.42	9.01	8.48

1	6.63	8.97	9.75	5.94	8.91	10.89	6.88	12.04	15.48	8.60	15.05	19.35	9.08	15.89	20.43	10.20	16.32	20.40	7.50	13.50	16.50
2	5.46	7.80	8.97	4.95	7.92	9.90	6.88	10.32	13.76	8.45	12.90	19.35	6.81	13.62	20.43	8.16	14.28	18.36	6.00	12.00	15.00
3	4.29	7.02	8.19	3.96	6.93	8.91	5.16	10.32	13.76	6.45	10.75	17.20	6.81	13.62	18.16	6.12	12.24	16.36	6.00	10.50	15.00
4	3.51	6.24	7.80	2.97	5.94	8.91	3.44	8.60	12.04	4.30	10.75	15.05	4.54	11.35	18.16	6.12	10.20	16.32	4.50	9.00	13.50
5	3.12	5.46	7.41	2.97	5.94	7.92	3.44	6.88	12.04	4.30	8.60	15.05	4.54	11.35	15.89	4.08	10.20	16.32	4.50	7.50	12.00
6	12.87	13.26	14.82	25.74	23.76	25.74	39.56	36.12	39.56	45.15	43.00	47.30	43.13	40.86	45.40	34.68	32.64	38.76	19.50	21.00	25.50
7	16.38	15.99	17.55	42.57	37.62	38.61	70.52	61.92	63.64	86.00	75.25	77.40	83.99	74.91	77.18	69.36	63.24	65.28	42.00	39.00	42.00
8	18.72	17.94	19.11	46.53	41.58	41.58	87.72	75.68	75.68	111.80	96.75	98.90	115.77	99.88	102.15	99.96	87.72	87.72	64.50	57.00	60.00
9	21.84	20.67	21.45	43.56	38.61	38.61	87.72	77.40	75.68	122.55	105.35	105.35	129.39	113.50	111.23	118.32	104.04	102.00	82.50	72.00	73.50
10	24.67	21.84	23.40	40.59	36.63	35.64	77.40	68.80	67.08	113.95	101.05	96.75	129.39	115.77	111.23	124.44	110.16	106.08	93.00	81.00	79.50
11	27.69	25.35	25.35	39.60	36.63	34.65	67.08	61.92	58.48	96.75	88.15	81.70	113.50	104.42	97.61	116.28	104.04	99.96	84.50	84.00	79.50
12	29.64	27.30	28.91	38.61	35.64	33.66	61.92	56.76	53.32	83.85	77.40	70.95	95.34	88.53	81.72	97.92	89.76	83.64	85.50	76.50	72.00
13	31.20	28.47	28.08	38.61	35.64	33.66	56.76	53.32	49.88	73.10	70.95	64.50	83.99	79.45	72.64	83.64	79.56	73.44	72.00	67.50	61.50
14	31.98	29.25	28.08	37.62	35.64	32.67	53.32	51.60	46.44	66.65	64.50	58.05	72.64	70.37	65.83	73.44	71.40	65.28	63.00	60.00	54.00
15	31.98	29.64	28.08	35.64	33.66	31.68	48.16	48.16	44.72	60.20	60.20	53.75	65.83	65.83	59.02	65.28	65.28	59.16	55.50	54.00	49.50
16	30.81	28.86	27.30	32.67	32.67	30.69	44.72	44.72	41.28	53.75	55.90	49.45	56.75	59.02	54.48	57.12	59.16	53.04	49.50	49.50	45.00
17	29.25	29.25	27.30	29.70	29.70	27.72	39.56	39.56	37.84	47.30	48.45	45.15	49.94	52.21	49.94	48.96	53.04	48.96	42.00	43.50	40.50
18	32.76	30.81	29.25	25.74	28.73	24.75	32.68	36.12	34.40	38.70	43.00	40.85	43.13	47.67	43.13	40.80	44.88	42.84	36.00	37.50	36.00
19	23.79	23.79	22.23	19.80	21.78	20.79	25.80	29.24	29.24	30.10	38.55	34.40	34.05	38.59	38.59	32.64	38.76	36.72	28.50	31.50	30.00
20	18.72	19.50	17.94	15.84	17.62	17.62	20.64	25.80	24.08	25.80	30.10	30.10	27.24	34.05	34.05	28.52	32.64	32.64	22.50	27.00	27.00
21	14.82	16.38	15.21	12.87	15.84	15.84	17.20	22.36	22.36	19.35	25.80	27.95	22.70	29.51	29.51	20.40	28.56	28.56	18.00	24.00	24.00
22	12.09	14.04	13.28	9.90	13.86	13.86	13.76	18.92	20.64	17.20	23.65	25.80	18.16	24.97	27.24	18.36	24.48	26.52	15.00	21.00	21.00
23	9.75	12.09	12.09	7.92	11.88	12.87	10.32	15.48	18.92	12.90	19.35	23.65	13.62	22.70	24.97	14.28	22.44	24.48	12.00	18.00	19.50
24	7.80	10.53	10.92	6.93	9.90	11.88	8.60	13.76	17.20	10.75	17.20	21.50	11.35	18.16	22.70	12.24	18.36	22.44	10.50	15.00	18.00



5.39	8.47	9.24	3.60	5.40	5.85	7.70	10.78	11.55	18.00	22.50	22.50	24.48	30.60	30.60	27.24	34.05	31.78	25.80	32.25	30.10	18.92	24.08	24.08	11.88	14.85	13.86
3.85	6.93	8.47	3.15	4.95	5.40	6.16	9.24	10.78	15.00	21.00	21.00	20.40	26.52	28.56	22.70	29.51	29.51	21.50	27.95	27.95	15.48	20.64	22.36	8.91	12.87	12.87
3.08	6.18	8.47	2.25	4.05	5.40	5.39	8.47	10.91	12.00	18.00	19.50	16.32	24.48	26.52	18.16	24.97	27.24	17.20	23.65	25.80	13.76	18.92	20.64	7.92	10.89	11.88
3.08	5.39	7.70	1.80	3.60	4.95	4.82	6.93	9.24	9.00	15.00	18.00	14.28	20.40	24.48	13.62	22.70	24.97	12.90	21.50	23.65	10.32	15.48	18.92	5.94	9.90	10.89
2.31	4.82	6.93	1.80	3.15	4.50	3.85	6.18	8.47	7.50	13.50	16.50	10.20	18.36	22.44	11.35	20.43	22.70	10.75	19.35	21.50	8.60	13.76	17.20	4.95	8.91	9.90
4.82	6.18	9.24	2.70	3.60	4.95	4.82	6.93	9.24	90.00	13.50	18.00	12.24	18.36	22.44	13.62	20.43	24.97	12.90	19.35	23.65	10.32	15.48	20.64	6.93	9.90	11.88
11.55	12.32	14.63	4.05	4.95	6.30	6.93	8.47	10.78	12.00	15.00	19.50	14.28	20.40	24.48	15.89	20.43	27.24	15.05	21.50	25.80	13.76	17.20	25.80	10.89	11.88	14.85
22.33	20.02	22.33	6.30	6.30	7.85	8.47	10.91	12.32	15.00	18.00	21.00	18.36	22.44	26.52	18.16	22.70	29.51	19.35	23.65	27.95	17.20	18.92	29.24	13.86	14.85	16.83
33.11	29.26	30.80	9.90	9.45	10.80	11.55	11.55	13.86	18.00	19.50	24.00	20.40	24.48	28.56	22.70	24.97	31.78	21.50	25.80	30.10	20.64	22.36	34.40	17.82	17.82	19.80
42.35	36.96	37.73	15.30	13.95	14.85	14.83	13.86	16.17	21.00	22.50	25.50	24.48	26.52	30.80	24.97	27.24	34.05	27.95	27.95	32.25	24.08	24.08	39.56	21.78	20.79	22.77
48.51	42.35	41.58	21.60	18.90	19.35	20.78	19.25	20.78	24.00	25.50	28.50	26.52	28.56	32.64	27.24	29.51	36.32	27.95	30.10	34.40	27.52	27.52	43.00	24.75	22.77	24.75
49.28	43.89	42.35	26.55	23.40	22.95	30.03	26.95	28.49	36.00	34.50	37.50	34.68	34.68	38.76	31.78	31.78	38.59	32.25	32.25	36.55	29.24	29.24	44.72	26.73	25.74	25.74
46.20	41.58	39.27	29.25	25.65	25.20	40.04	35.42	35.42	54.00	49.50	51.00	53.04	48.96	53.04	45.40	43.13	40.86	38.55	38.55	38.70	32.68	30.96	48.16	28.71	26.73	27.72
40.64	36.96	33.88	29.25	26.10	24.75	47.74	42.35	40.81	73.50	68.00	66.00	81.60	71.40	73.44	72.64	65.83	56.75	55.90	51.60	53.75	39.56	36.12	48.16	29.70	27.72	27.72
34.65	33.11	30.03	26.55	23.85	22.50	51.59	45.43	43.89	90.00	79.50	78.00	106.08	93.84	93.84	102.15	90.80	81.72	86.00	75.25	77.40	56.76	51.60	53.32	32.67	30.68	30.68
30.80	30.03	26.95	22.50	21.15	19.35	50.05	45.43	42.35	99.00	87.00	84.00	126.48	110.16	108.12	129.39	113.50	104.42	113.95	101.05	96.90	80.84	72.24	65.36	43.56	38.61	37.62
26.95	26.95	23.87	19.35	18.45	16.65	44.66	40.81	37.73	99.00	88.50	84.00	134.64	118.32	114.24	145.28	127.12	120.31	135.45	118.25	113.95	101.48	87.72	84.28	58.43	50.49	48.51
22.33	23.10	20.79	16.20	16.20	14.40	35.42	33.88	30.80	87.00	79.50	73.50	124.44	112.20	104.04	138.47	124.85	118.04	133.30	118.25	111.80	103.20	92.88	91.16	61.38	55.44	52.47
17.71	19.25	17.71	12.60	13.05	11.70	27.72	26.95	24.64	64.50	61.50	55.50	89.76	85.68	77.52	99.88	93.07	86.28	94.60	88.15	81.70	72.24	67.08	65.36	43.56	40.59	37.62
13.86	16.17	15.40	9.90	11.25	9.90	21.56	23.10	20.02	48.50	49.50	45.00	69.36	69.36	61.20	77.18	74.91	68.10	73.10	70.95	64.50	56.76	55.94	51.60	32.67	32.67	29.70
11.55	13.86	13.86	8.10	9.45	8.00	17.71	19.25	17.71	40.50	42.00	37.50	55.08	57.12	51.00	61.29	61.29	54.48	58.05	58.05	51.60	44.72	44.72	43.00	25.74	26.73	24.75
9.24	12.32	12.32	6.75	8.10	8.10	14.63	16.94	15.40	33.00	36.00	31.50	44.88	48.96	42.84	61.29	52.21	45.40	47.30	49.45	43.00	36.12	37.84	36.12	20.79	22.77	20.79
7.70	10.78	11.55	5.40	7.20	7.20	11.55	14.63	13.86	27.00	31.50	28.50	36.72	42.84	38.76	40.86	45.40	40.86	38.70	43.00	38.70	29.24	32.68	30.96	16.83	19.80	17.82
6.16	9.24	10.01	4.50	6.30	6.75	9.24	12.32	12.32	21.00	27.00	25.50	30.10	36.72	34.68	31.78	38.59	36.32	30.10	36.55	34.40	24.08	27.52	27.52	13.86	16.83	15.84

จุฬาลงกรณ์มหาวิทยาลัย

1	8.84	11.96	13.00	7.92	11.88	14.52	7.56	13.23	17.01	8.72	15.26	19.62	8.60	15.05	19.35	8.95	14.32	17.90	5.75	10.35	12.65
2	7.28	10.40	11.96	6.60	10.56	13.20	7.56	11.34	15.12	6.54	13.08	19.62	6.45	12.90	19.35	7.16	12.53	16.11	4.80	9.20	11.50
3	5.72	9.36	10.92	5.28	9.24	11.88	5.67	11.34	15.12	6.54	10.90	17.44	6.45	12.90	17.20	5.37	10.74	16.11	4.80	8.05	11.50
4	4.68	8.32	10.40	3.96	7.92	11.88	3.78	9.45	13.23	4.36	10.90	15.26	4.30	10.75	17.20	5.37	8.95	14.32	3.45	6.90	10.35
5	4.16	7.28	9.88	3.96	7.92	10.56	3.78	7.56	13.23	4.36	8.72	15.26	4.30	10.75	15.05	5.37	8.95	14.32	3.45	5.75	9.20
6	17.16	17.68	19.76	34.32	31.68	34.32	43.47	38.69	43.47	45.78	43.60	47.96	40.85	38.70	43.00	30.43	28.64	34.01	14.95	16.10	19.55
7	21.84	21.32	23.40	56.76	50.16	51.48	77.49	68.04	69.93	87.20	76.30	78.48	79.55	70.95	73.10	60.86	55.49	57.28	32.20	28.90	32.20
8	24.96	23.92	25.48	62.04	55.44	55.44	96.39	83.16	83.16	113.36	98.10	100.28	109.65	94.60	96.75	87.71	76.97	76.97	49.45	43.70	46.00
9	29.12	27.56	28.60	58.08	51.48	51.48	96.39	85.05	83.16	124.26	106.82	106.82	122.55	107.50	105.35	103.82	91.29	89.50	63.25	55.20	56.35
10	32.76	29.12	31.20	54.12	48.84	47.52	85.05	75.60	73.71	115.54	102.46	98.10	122.55	109.65	105.35	109.19	96.66	93.08	71.30	62.10	60.95
11	36.92	33.80	33.80	52.80	48.84	46.20	73.71	68.04	64.26	98.10	88.38	82.84	107.50	98.90	92.45	102.03	91.29	87.71	72.45	64.40	60.95
12	39.52	36.40	35.88	51.48	47.52	44.88	68.04	62.37	58.59	85.02	78.48	71.94	90.30	83.85	77.40	85.92	78.76	73.39	65.55	58.65	55.20
13	41.60	37.96	37.44	51.48	47.52	44.88	62.37	58.59	54.81	74.12	71.94	65.40	79.55	75.25	68.80	73.39	69.81	64.44	55.20	51.75	47.15
14	42.64	39.00	37.44	50.16	47.52	43.56	58.59	56.70	51.03	67.58	65.40	58.86	68.80	66.65	62.35	64.44	62.65	57.28	48.30	46.00	41.40
15	42.64	39.52	37.44	47.52	44.88	42.24	52.92	52.92	49.14	61.04	61.04	54.50	62.35	62.35	55.90	57.28	57.28	51.91	42.55	41.40	37.95
16	41.08	38.48	36.40	43.56	43.56	40.92	49.14	49.14	45.36	54.50	56.68	50.14	53.75	55.90	51.60	50.12	51.91	46.54	37.95	37.95	34.50
17	39.00	39.00	36.40	39.60	39.60	36.96	43.47	43.47	41.58	47.96	50.14	45.78	47.30	49.45	47.30	42.96	46.54	42.96	32.20	33.35	31.05
18	43.68	41.08	39.00	34.32	35.64	33.00	35.91	39.69	37.80	39.24	43.60	41.42	40.85	45.15	40.85	35.80	39.38	37.59	27.60	28.75	27.60
19	31.72	31.72	29.64	26.40	29.04	27.72	28.35	32.13	32.13	30.52	37.06	34.88	32.25	36.55	36.55	28.64	34.01	32.22	21.85	24.15	23.00
20	24.96	26.00	23.92	21.12	23.76	23.76	22.68	28.35	26.46	26.16	30.52	30.52	25.80	32.25	32.25	23.27	28.64	28.64	17.25	20.70	20.70
21	19.76	21.84	20.28	17.16	21.12	21.12	18.90	24.57	24.57	17.42	26.16	26.34	21.50	27.95	27.95	17.90	25.06	25.06	13.80	18.40	18.40
22	16.12	18.72	17.68	13.20	18.48	18.48	15.12	20.79	22.68	17.44	23.98	26.16	17.20	23.65	25.80	16.11	21.48	23.27	11.50	16.10	16.10
23	13.00	16.12	16.12	10.56	15.84	17.16	11.34	17.01	20.79	13.08	19.62	23.98	12.90	21.50	23.65	12.53	19.69	21.46	9.20	13.80	14.85
24	10.40	14.04	14.56	9.24	13.20	15.84	9.45	15.12	18.90	10.90	17.44	21.80	10.75	17.20	21.50	10.74	16.11	19.69	8.05	11.50	13.80

3.15	4.95	5.40	3.28	4.92	5.33	4.50	6.30	6.75	13.80	17.25	17.25	21.48	26.85	26.85	25.80	32.25	30.10	26.16	32.70	30.52	20.79	26.46	26.46	15.84	19.80	18.48
2.25	4.05	4.95	2.87	4.51	4.92	3.60	5.40	6.30	11.50	16.10	16.10	17.90	23.27	25.06	21.50	27.95	27.95	21.80	28.34	28.34	17.01	22.68	24.57	11.88	17.16	17.16
1.80	3.60	4.95	2.05	3.69	4.92	3.15	4.95	5.85	9.20	13.80	14.95	14.32	21.48	23.27	17.20	23.65	25.80	17.44	23.98	26.16	15.12	20.79	22.68	10.56	14.52	15.84
1.80	3.15	4.50	1.64	3.28	4.51	2.70	4.05	5.40	6.90	11.50	13.80	12.53	17.90	21.48	12.90	21.50	23.65	13.08	21.80	23.98	11.34	17.01	20.79	7.92	13.20	14.52
1.35	2.70	4.05	1.64	2.87	4.10	2.25	3.60	4.95	5.75	10.35	12.65	8.95	16.11	19.69	10.75	19.35	21.50	10.90	19.62	21.80	9.45	15.12	18.90	6.00	11.88	13.20
2.70	3.60	5.40	2.46	3.28	4.51	2.70	4.05	5.40	69.00	10.35	13.80	10.74	16.11	19.69	12.90	19.35	23.65	13.08	19.62	23.98	11.34	17.01	22.68	9.24	13.20	15.84
6.75	7.20	8.55	3.69	4.51	5.74	4.05	4.95	6.30	9.20	11.50	14.95	12.53	17.90	21.48	15.05	19.35	25.80	15.26	21.80	26.16	15.12	19.90	28.35	14.52	15.84	19.80
13.05	11.70	13.05	5.74	5.74	6.97	4.95	5.85	7.20	11.50	13.80	16.10	16.11	19.69	23.27	17.20	21.50	27.95	19.62	23.98	28.34	18.90	20.79	32.13	18.48	19.80	22.44
19.35	17.10	18.00	9.02	8.61	9.84	6.75	6.75	8.10	13.80	14.95	16.40	17.90	21.48	25.06	21.50	23.65	30.10	21.80	26.16	30.52	22.68	24.57	37.80	23.76	23.76	26.40
24.75	21.80	22.05	13.94	12.71	13.03	8.55	8.10	9.45	16.10	17.25	19.55	21.48	23.27	26.85	23.65	25.80	32.25	28.34	28.34	32.70	26.46	26.46	43.47	29.04	27.72	30.38
28.35	24.75	24.30	19.68	17.22	17.63	12.15	11.25	12.15	18.40	19.55	21.85	23.27	25.06	28.64	25.80	27.95	34.40	28.34	30.52	34.88	30.24	30.24	47.25	33.00	30.36	33.00
28.80	25.65	24.75	24.19	21.32	20.91	17.55	15.75	16.65	27.60	26.45	28.75	30.43	30.43	34.01	30.10	30.10	36.55	32.70	32.70	37.06	32.13	32.13	49.14	35.64	34.32	34.32
27.00	24.30	22.95	26.65	23.37	22.96	23.40	20.70	20.70	41.40	37.95	39.10	46.34	42.96	46.54	43.00	40.85	38.70	37.06	37.06	39.24	35.91	34.02	52.92	38.28	35.64	36.96
23.40	21.60	19.80	26.65	23.78	22.55	27.90	24.75	23.85	56.35	50.60	50.60	71.60	62.65	64.44	68.80	62.35	53.75	56.68	52.32	54.50	43.47	39.69	52.92	39.60	36.96	36.96
20.25	19.35	17.55	24.19	21.73	20.50	30.15	26.55	25.65	69.00	60.95	59.80	93.08	82.34	82.34	96.75	86.00	77.40	87.20	76.30	78.48	62.37	56.70	58.59	43.56	40.92	40.92
18.00	17.55	15.75	20.50	19.27	17.63	29.25	26.55	24.75	75.90	66.70	64.40	110.98	96.66	94.87	122.55	107.50	96.90	115.54	102.46	100.28	88.83	79.38	71.82	58.08	51.48	50.16
15.75	15.75	13.95	17.63	16.81	15.17	26.10	23.85	22.05	75.90	67.85	64.40	118.14	103.82	100.24	137.60	120.40	113.95	137.34	119.90	115.54	111.51	96.39	92.61	75.24	67.32	64.68
13.05	13.50	12.15	14.76	14.76	13.12	20.70	19.80	18.00	66.70	60.95	56.35	104.19	98.45	91.29	131.15	118.25	111.80	135.16	119.90	113.36	113.40	102.06	100.17	81.84	73.92	69.96
10.35	11.25	10.35	11.48	11.89	10.66	16.20	15.75	14.40	49.45	47.15	42.55	76.76	75.18	68.02	94.60	88.15	81.70	95.92	89.38	82.84	79.38	73.71	71.82	58.08	54.12	50.16
8.10	9.45	9.00	9.02	10.25	9.02	12.60	13.50	11.70	37.95	37.95	34.50	60.66	60.66	53.70	73.10	70.95	64.50	74.12	71.94	65.40	62.37	60.48	56.70	43.56	43.56	39.60
6.75	8.10	8.10	7.38	8.61	8.20	10.35	11.25	10.35	31.05	32.20	28.75	48.13	50.12	44.75	58.05	56.05	51.60	58.86	58.86	52.32	49.14	49.14	47.25	34.32	35.64	33.00
5.40	7.20	7.20	6.15	7.38	7.38	8.55	9.90	9.00	25.30	27.60	24.15	39.38	42.96	37.59	58.05	49.45	43.00	47.96	50.14	43.60	39.69	41.58	39.69	27.72	30.36	27.72
4.50	6.30	6.75	4.92	6.56	6.56	6.75	8.55	8.10	20.70	24.15	21.85	32.22	37.59	34.01	38.70	43.00	38.70	39.24	43.60	39.24	32.13	35.91	34.02	22.44	26.40	23.76
3.60	5.40	5.85	4.10	5.74	6.15	5.40	7.20	7.20	16.10	20.70	19.55	26.85	32.22	30.43	30.10	36.55	34.40	30.52	37.06	34.88	26.46	30.24	30.24	18.48	22.44	21.12

จุฬาลงกรณ์มหาวิทยาลัย

1	11.22	15.18	16.50	8.52	12.78	15.62	7.76	13.58	17.46	8.68	15.19	19.53	8.28	14.49	18.63	8.35	13.36	16.70	4.95	8.91	10.89
2	9.24	13.20	15.18	7.10	11.36	14.20	7.76	11.64	15.52	6.51	13.02	19.53	6.21	12.42	18.63	6.68	11.69	15.03	3.96	7.92	9.90
3	7.26	11.88	13.86	5.68	9.94	12.78	5.82	11.64	15.52	6.51	10.85	17.36	6.21	12.42	16.56	5.01	10.02	15.03	3.96	6.93	9.90
4	5.94	10.56	13.20	4.26	8.52	12.78	3.88	9.70	13.58	4.34	10.85	15.19	4.14	10.35	18.56	5.01	8.35	13.36	2.97	4.95	7.92
5	5.28	9.24	12.54	4.26	8.52	11.36	3.88	7.76	13.58	4.34	8.68	15.19	4.14	10.35	14.49	3.34	8.35	13.36	2.97	4.95	7.92
6	21.78	22.44	25.08	38.92	34.08	36.92	44.62	40.74	44.62	45.57	43.40	47.74	39.33	37.26	41.40	28.39	26.72	31.73	12.87	13.86	16.83
7	27.72	27.06	29.70	61.06	53.96	55.38	79.54	69.84	71.78	86.80	75.95	78.12	76.59	68.31	70.38	56.78	51.77	53.44	27.72	25.74	27.72
8	31.68	30.36	32.34	66.74	59.64	59.64	98.94	85.36	85.36	112.84	97.65	99.82	105.57	91.08	93.15	81.83	71.81	71.81	42.57	37.62	39.60
9	36.96	34.98	36.30	62.48	55.38	55.38	98.94	87.30	85.36	123.69	106.33	106.33	117.99	103.50	101.43	96.86	85.17	83.50	54.45	47.52	48.51
10	41.58	36.96	39.60	58.22	52.54	51.12	87.30	77.60	75.66	115.01	101.99	97.65	117.99	105.57	101.43	101.87	90.18	86.84	61.38	53.46	52.47
11	46.86	42.90	42.90	56.80	52.54	49.70	75.66	69.84	65.96	97.65	88.97	82.46	103.50	95.22	89.01	95.19	85.17	81.83	62.37	55.44	52.47
12	50.16	46.20	45.54	55.38	51.12	48.28	69.84	64.02	60.14	84.63	78.12	71.61	86.94	80.73	74.52	80.16	73.48	68.47	56.43	50.49	47.52
13	52.80	48.18	47.52	55.38	51.12	48.28	64.02	60.14	56.26	73.78	71.61	65.10	76.59	72.45	66.24	68.47	65.13	60.12	47.52	44.55	40.59
14	54.12	49.50	47.52	53.96	51.12	46.86	60.14	58.20	52.38	67.27	65.10	58.59	66.24	64.17	60.03	60.12	58.45	53.44	41.58	39.60	35.64
15	54.12	50.16	47.52	51.12	48.28	45.44	54.32	54.32	50.44	60.78	60.76	54.25	60.03	60.03	53.82	53.44	53.44	48.43	36.63	35.64	32.67
16	52.14	48.84	46.20	46.86	46.86	44.02	50.44	50.44	46.56	54.25	56.42	49.91	51.75	53.82	49.68	46.76	48.43	43.42	32.67	32.67	29.70
17	49.50	49.50	46.20	42.60	42.60	39.76	44.62	44.62	42.68	47.74	49.91	45.57	45.54	47.61	45.54	40.08	43.42	40.08	27.72	28.71	26.73
18	55.44	52.14	49.50	36.92	38.34	35.50	36.86	40.74	38.80	39.06	43.40	41.23	39.33	43.47	39.33	33.40	36.74	35.07	23.76	24.75	23.76
19	40.26	40.26	37.62	28.40	31.24	29.82	29.10	32.98	32.98	30.38	36.89	34.72	31.05	35.19	35.19	26.72	31.73	30.06	18.81	20.79	19.80
20	31.68	33.00	30.36	22.72	25.56	25.56	23.28	29.10	27.16	26.04	30.38	30.38	24.84	31.05	31.05	21.71	26.72	26.72	14.85	17.82	17.82
21	25.08	27.72	25.74	18.46	22.72	22.72	19.40	25.22	25.22	19.53	26.04	28.21	20.70	26.91	26.91	16.70	23.38	23.38	11.88	15.84	15.84
22	20.46	23.76	22.44	14.20	19.88	19.88	15.52	21.34	23.29	17.36	23.87	26.04	16.56	22.77	24.84	15.03	20.04	21.71	9.90	13.86	13.86
23	16.50	20.46	20.46	11.36	17.04	18.46	11.64	17.46	21.34	13.02	19.53	23.87	12.42	20.70	22.77	11.69	18.37	20.04	7.92	11.88	12.87
24	13.20	17.82	18.48	9.94	14.20	17.04	9.70	15.52	19.40	10.85	17.36	21.70	10.35	16.56	20.70	10.02	15.03	18.37	6.93	9.90	11.88

2.87	4.51	4.92	3.28	4.92	5.33	4.10	5.74	6.15	11.88	14.85	14.85	29.04	25.05	25.05	24.84	31.05	28.98	26.04	32.55	30.38	21.34	27.16	27.16	17.04	21.30	19.8
2.05	3.69	4.51	2.87	4.51	4.92	3.28	4.92	5.74	9.90	13.86	13.86	16.70	21.71	23.38	20.70	26.91	26.91	21.70	28.21	28.21	17.46	23.28	25.22	12.78	18.46	18.4
1.64	3.28	4.51	2.05	3.69	4.92	2.87	4.51	5.33	7.92	11.88	12.87	13.36	20.04	21.71	16.56	22.77	24.84	17.36	23.87	26.04	15.52	21.34	23.28	11.36	15.82	17.0
1.64	2.87	4.10	1.64	3.28	4.51	2.46	3.69	4.92	5.94	9.90	11.88	11.88	16.70	20.04	12.42	20.70	22.77	13.02	21.70	23.87	11.84	17.46	21.34	8.52	14.20	15.6
1.23	2.46	3.69	1.64	2.87	4.10	2.05	3.28	4.51	4.95	8.91	10.89	8.35	15.03	18.37	10.35	18.63	20.70	10.85	19.53	21.70	9.70	15.52	19.40	7.10	12.78	14.2
2.46	3.28	4.92	2.46	3.28	4.51	2.46	3.69	4.92	59.40	8.91	11.88	10.02	15.03	18.37	12.42	18.63	22.77	13.02	19.53	23.87	11.64	17.46	23.28	9.94	14.20	17.0
6.15	6.56	7.79	3.69	4.51	5.74	3.69	4.51	5.74	7.92	9.90	12.87	11.69	16.70	20.04	14.49	18.63	24.84	15.19	21.70	26.04	15.52	19.40	29.10	15.62	17.04	21.3
11.89	10.66	11.89	5.74	5.74	6.97	4.51	5.33	6.56	9.90	11.88	13.86	15.03	18.37	21.71	16.56	20.70	26.91	19.53	23.87	26.21	19.40	21.34	32.98	19.88	21.30	24.1
17.83	15.58	16.40	9.02	8.61	9.84	6.15	6.15	7.38	11.88	12.87	15.84	16.70	20.04	23.38	20.70	22.77	28.98	21.70	26.04	30.38	23.28	25.22	38.90	25.56	25.56	28.4
22.55	19.68	20.09	13.94	12.71	13.53	7.79	7.38	8.61	13.86	14.85	16.83	20.04	21.71	25.05	22.77	24.84	31.05	28.21	28.21	32.55	27.16	27.16	44.62	31.24	29.82	32.5
25.83	22.55	22.14	19.68	17.22	17.83	11.07	10.25	11.07	15.84	16.83	18.81	21.71	23.38	26.72	24.84	26.91	33.12	28.21	30.38	34.72	31.04	31.04	48.50	35.50	32.66	35.8
26.24	23.37	22.55	24.19	21.32	20.91	15.99	14.35	15.17	23.76	22.77	24.75	28.39	28.39	31.73	28.98	28.98	35.19	32.55	32.55	36.89	32.98	32.98	50.44	38.34	36.92	36.9
24.60	22.14	20.91	26.65	23.37	22.96	21.32	18.86	18.86	35.64	32.67	33.06	43.42	40.08	43.42	41.40	39.33	37.26	36.89	36.89	39.06	36.86	34.92	54.32	41.18	38.34	39.7
21.32	19.68	18.04	26.65	23.78	22.55	25.42	22.55	21.73	48.51	43.56	43.56	66.00	58.45	60.12	66.24	60.03	51.75	56.42	52.08	54.25	44.62	40.74	54.32	42.60	39.76	39.7
18.45	17.83	15.99	24.19	21.73	20.50	27.47	24.19	23.37	59.40	52.47	51.48	98.84	76.82	76.82	93.15	82.80	74.52	86.80	75.95	78.12	64.02	58.20	60.14	46.86	44.02	44.0
16.40	15.99	14.35	20.50	19.27	17.83	26.65	24.19	22.55	65.34	57.42	55.44	103.34	90.18	88.51	117.99	103.50	95.22	115.01	101.99	99.82	91.18	81.48	73.72	62.46	55.38	53.9
14.35	14.35	12.71	17.63	16.81	15.17	23.78	21.73	20.09	65.34	58.41	55.44	110.22	96.86	93.52	132.48	115.92	109.71	136.71	119.35	115.01	114.46	98.94	95.06	80.94	72.42	69.5
11.88	12.30	11.07	14.76	14.76	13.12	18.86	18.04	16.40	57.42	52.47	48.51	101.87	91.85	85.17	126.27	113.85	107.64	134.54	119.35	112.84	116.40	104.76	102.82	88.04	79.52	75.2
9.43	10.25	9.43	11.48	11.89	10.66	14.76	14.35	13.12	42.57	40.59	36.63	73.48	70.14	63.46	91.08	84.87	78.66	95.48	88.97	82.46	81.48	75.66	73.72	62.46	58.22	52.9
7.38	8.61	8.20	9.02	10.25	9.02	11.48	12.30	10.66	32.67	32.67	29.70	56.78	56.78	50.10	70.38	68.31	62.10	73.78	71.61	65.10	64.02	62.08	58.20	46.86	46.86	42.6
6.15	7.38	7.38	7.38	8.61	8.20	9.43	10.25	9.43	26.72	27.72	24.75	45.09	46.76	41.75	55.89	55.89	49.68	58.59	58.59	52.06	50.44	50.44	48.50	36.92	38.34	35.5
4.92	6.56	6.56	6.15	7.38	7.38	7.79	9.02	8.20	21.78	23.76	20.79	36.74	40.08	35.07	55.89	47.61	41.40	47.74	49.91	43.40	40.74	42.66	40.74	29.82	32.66	29.8
4.10	5.74	6.15	4.92	6.56	6.56	6.15	7.79	7.38	17.82	20.79	18.81	30.06	35.07	31.73	37.26	41.40	37.26	39.06	43.40	39.06	32.98	36.86	34.92	24.14	28.40	25.5
3.28	4.92	5.33	4.10	5.74	6.15	4.92	6.56	6.56	13.86	17.82	16.83	25.05	30.06	28.38	28.98	35.19	33.12	30.38	36.89	34.72	27.16	31.04	31.04	19.88	24.14	22.7

1	6.97	9.43	10.25	6.00	9.00	11.00	6.72	11.76	15.12	8.38	14.63	18.81	8.76	15.33	19.71	9.80	15.88	19.60	7.15	12.87	15.73
2	5.74	8.20	9.43	5.00	8.00	10.00	6.72	10.08	13.44	6.27	12.54	18.81	6.57	13.14	19.71	7.84	13.72	17.64	5.72	11.44	14.30
3	4.51	7.38	8.61	4.00	7.00	9.00	5.04	10.08	13.44	6.27	10.45	16.72	6.57	13.14	17.52	5.88	11.76	17.64	5.72	10.01	14.30
4	3.69	6.56	8.20	3.00	6.00	8.00	3.36	8.40	11.76	4.18	10.45	14.63	4.38	10.95	15.33	3.92	9.80	15.88	4.29	7.15	11.44
5	3.28	5.74	7.79	3.00	6.00	8.00	3.36	6.72	11.76	4.18	8.36	14.63	4.38	10.95	15.33	3.92	9.80	15.88	4.29	7.15	11.44
6	13.53	13.94	15.58	26.00	24.00	26.00	38.64	35.28	38.64	43.89	41.80	45.98	41.61	39.42	43.80	33.32	31.36	37.24	18.59	20.02	24.31
7	17.22	16.81	18.45	43.00	38.00	39.00	68.88	60.48	62.16	83.60	73.15	75.24	81.03	72.27	74.48	66.64	60.76	62.72	40.04	37.18	40.04
8	19.68	18.66	20.09	47.00	42.00	42.00	85.68	75.60	73.92	108.68	94.05	96.14	111.89	96.36	98.55	96.04	84.28	84.28	61.49	54.34	57.20
9	22.96	21.73	22.55	44.00	39.00	39.00	85.68	75.60	73.92	119.13	102.41	102.41	124.83	109.50	107.31	113.68	99.96	98.00	78.65	68.64	70.07
10	25.83	22.96	24.60	41.00	37.00	36.00	75.60	67.20	65.52	110.77	96.23	94.05	124.83	111.69	107.31	119.56	105.84	101.92	88.68	77.22	75.79
11	29.11	26.65	26.65	40.00	37.00	35.00	65.52	60.48	57.12	94.05	85.68	78.42	91.98	85.41	78.84	94.08	86.24	80.36	81.51	72.93	68.64
12	31.16	28.70	28.29	39.00	36.00	34.00	60.48	55.44	52.08	81.51	75.24	68.97	91.98	85.41	78.84	94.08	86.24	80.36	81.51	72.93	68.64
13	32.80	29.93	29.52	39.00	36.00	34.00	55.44	52.08	48.72	71.06	68.97	62.70	81.03	76.65	70.08	80.36	76.44	70.56	68.64	64.35	58.63
14	33.62	30.75	29.52	38.00	36.00	33.00	52.08	50.40	45.36	64.79	62.70	56.43	70.08	67.89	63.51	70.56	68.60	62.72	52.91	51.48	47.19
15	33.62	31.16	29.52	36.00	34.00	32.00	47.04	47.04	43.68	58.52	58.52	52.25	63.51	63.51	56.84	54.88	58.84	50.98	47.19	47.19	42.90
16	32.39	30.34	28.70	33.00	33.00	31.00	43.68	43.68	40.32	45.98	48.07	43.89	48.18	50.37	48.18	47.04	50.98	47.04	40.04	41.47	38.61
17	30.75	30.75	28.70	30.00	30.00	28.00	38.64	38.64	36.96	37.62	41.80	39.71	41.81	45.99	41.81	39.20	43.12	41.16	34.32	35.75	34.32
18	34.44	32.39	30.75	26.00	27.00	25.00	31.92	35.28	33.60	29.28	35.53	33.44	32.85	37.23	37.23	31.36	37.24	35.28	27.17	30.03	28.60
19	25.01	25.01	23.37	20.00	22.00	21.00	25.20	28.56	28.56	25.08	29.28	29.28	26.28	32.85	32.85	25.48	31.36	31.36	21.45	25.74	25.74
20	19.68	20.50	18.86	16.00	18.00	18.00	20.16	25.92	23.52	18.81	25.08	27.17	21.90	26.47	28.47	19.60	27.44	27.44	17.16	22.88	22.88
21	15.58	17.22	15.99	13.00	16.00	16.00	13.44	16.48	20.16	16.72	22.99	25.08	17.52	24.09	26.28	17.64	23.52	25.48	14.30	20.02	20.02
22	12.71	14.76	13.94	10.00	14.00	14.00	10.08	15.12	18.48	10.54	18.81	22.99	13.14	21.90	24.09	13.72	21.56	23.52	11.44	17.18	18.59
23	10.25	12.71	12.71	8.00	12.00	13.00	8.40	13.44	16.80	10.45	16.72	20.90	10.95	17.52	21.90	11.76	17.64	21.56	10.01	14.30	17.16
24	8.20	11.07	11.48	7.00	10.00	12.00	8.40	13.44	16.80	10.45	16.72	20.90	10.95	17.52	21.90	11.76	17.64	21.56	10.01	14.30	17.16

518	8.14	8.88	3.68	5.52	5.98	7.40	10.36	11.10	17.16	21.45	21.45	23.52	29.40	29.40	26.28	32.85	30.66	25.08	31.35	29.28	18.48	23.52	23.52	12.00	15.00	14.00
3.70	6.66	8.14	3.72	5.06	5.52	5.92	8.88	10.36	14.30	20.02	20.02	19.60	25.48	27.44	21.90	28.47	28.47	20.90	27.17	27.17	15.12	20.16	21.84	9.00	13.00	13.00
2.96	5.92	8.14	2.30	4.14	5.52	5.18	8.14	9.62	11.44	17.16	18.59	15.68	23.52	25.48	17.52	24.09	26.28	16.72	22.99	25.08	13.44	18.48	20.16	8.00	11.00	12.00
2.96	5.18	7.40	1.84	3.68	5.06	4.44	6.66	8.88	8.58	14.30	17.16	15.72	19.60	23.52	13.14	21.90	24.09	12.54	20.90	22.99	10.08	15.12	18.48	6.00	10.00	11.00
2.22	4.44	6.66	1.84	3.22	4.60	3.70	5.92	8.14	7.15	12.87	15.73	9.80	17.64	21.56	10.95	19.71	21.90	10.45	18.81	20.90	8.40	13.44	16.80	5.00	9.00	10.00
4.44	5.92	8.88	2.76	3.68	5.06	4.44	6.66	8.88	85.80	12.87	17.16	11.69	17.64	21.56	13.14	19.71	24.09	12.54	18.81	22.99	10.08	15.12	20.16	7.00	10.00	12.00
11.10	11.84	14.06	4.14	5.06	6.44	6.66	8.14	10.36	11.44	14.30	18.59	13.72	19.60	23.52	15.33	19.71	26.28	14.63	20.90	25.08	13.44	16.80	20.20	11.00	12.00	15.00
21.46	19.24	21.46	6.44	6.44	7.82	8.14	9.62	11.84	14.30	17.16	20.02	17.94	21.56	25.48	17.52	21.90	28.47	18.81	22.99	27.17	16.80	18.48	28.56	14.00	15.00	17.00
31.82	28.12	29.60	10.12	9.66	11.04	11.10	11.10	13.32	17.16	18.59	22.88	19.60	23.52	27.44	24.09	26.28	32.85	27.17	27.17	31.35	23.52	23.52	38.64	22.00	21.00	23.00
40.70	35.52	36.26	15.64	14.26	15.18	14.06	13.32	15.54	20.02	21.45	24.31	23.52	25.48	29.40	24.09	26.28	32.85	27.17	27.17	31.35	23.52	23.52	38.64	22.00	21.00	23.00
46.62	40.70	39.96	22.08	19.32	19.78	19.98	18.50	19.98	22.88	24.31	27.17	25.48	27.44	31.36	26.28	28.47	35.04	27.17	27.17	31.35	23.52	23.52	38.64	22.00	21.00	23.00
47.36	42.18	40.70	27.14	23.92	23.46	28.88	25.90	27.38	34.32	32.89	35.75	33.32	33.32	37.24	30.66	30.66	37.23	31.35	31.35	35.53	28.56	28.56	43.68	27.00	26.00	26.00
44.40	39.96	37.74	29.90	26.22	25.76	38.48	34.04	34.04	51.48	47.19	48.66	30.96	47.04	50.96	43.80	41.61	39.42	35.53	35.53	37.62	31.92	30.24	47.04	29.00	27.00	28.00
38.48	35.52	32.56	29.90	26.68	25.30	45.88	40.70	39.22	85.80	75.75	74.9	101.92	90.16	90.16	98.55	87.60	78.84	83.60	73.15	75.24	55.44	50.40	52.08	33.00	31.00	31.00
33.30	31.82	28.86	27.14	24.38	23.00	49.58	43.66	42.18	94.38	80.96	80.96	111.52	105.84	103.68	124.83	109.50	100.74	110.77	96.23	96.14	78.96	70.56	63.84	44.00	39.00	38.00
29.60	28.86	25.90	23.00	21.62	19.78	48.10	43.66	40.70	94.38	80.96	80.96	111.52	105.84	103.68	124.83	109.50	100.74	110.77	96.23	96.14	78.96	70.56	63.84	44.00	39.00	38.00
25.90	25.90	22.94	19.78	18.86	17.02	42.92	39.22	36.26	94.38	80.96	80.96	111.52	105.84	103.68	124.83	109.50	100.74	110.77	96.23	96.14	78.96	70.56	63.84	44.00	39.00	38.00
21.46	22.20	19.98	16.56	16.56	14.72	34.04	32.56	29.60	82.94	75.75	70.07	101.92	90.16	99.96	133.59	120.45	113.69	129.58	114.95	108.68	100.80	90.72	89.04	62.00	56.00	53.00
17.02	18.50	17.02	12.88	13.34	11.96	26.64	25.90	23.68	61.49	58.63	52.91	87.84	80.36	74.48	96.36	89.79	83.26	91.96	85.69	79.42	70.56	65.52	63.84	44.00	41.00	38.00
13.32	15.54	14.80	10.12	11.50	10.12	20.72	22.20	19.24	47.19	47.19	42.90	67.92	66.64	58.80	74.46	72.27	65.70	71.06	68.97	62.70	55.44	53.76	50.40	33.00	33.00	30.00
11.10	13.32	13.32	8.28	9.66	9.20	17.02	18.50	17.02	38.61	40.04	35.75	54.90	54.88	49.00	59.13	59.13	52.54	56.43	56.43	50.16	43.68	43.68	42.00	26.00	27.00	25.00
8.88	11.84	11.84	6.90	8.28	8.28	14.06	16.28	14.80	31.46	34.32	30.03	43.12	47.04	41.16	59.13	50.37	43.68	45.98	48.07	41.80	35.28	36.96	35.28	21.00	23.00	21.00
7.40	10.36	11.10	5.52	7.36	7.36	11.10	14.06	13.32	25.74	30.03	27.17	35.28	41.16	37.24	39.42	43.80	39.42	37.62	41.80	37.62	28.56	31.92	30.24	17.00	20.00	18.00
5.92	8.88	9.62	4.60	6.44	6.90	8.88	11.84	11.84	20.02	25.74	24.31	29.40	35.28	33.32	30.66	37.23	35.04	29.28	35.53	33.44	23.52	26.88	26.88	14.00	17.00	16.00

Table with 24 rows and multiple columns of numerical data. The first column contains integers from 1 to 24. The following columns contain numerical values, with some values appearing in bold text.

Table with 24 rows and multiple columns of numerical data. The first column contains integers from 3.08 to 3.52. The following columns contain numerical values, with some values appearing in bold text.

1	6.12	8.28	9.00	3.00	4.50	5.50	5.36	9.38	12.06	7.84	13.72	17.84	9.08	15.89	20.43	11.20	17.92	22.40	9.55	17.19	21.01
2	5.04	7.20	8.28	2.50	4.00	5.00	5.36	8.04	10.72	5.88	11.76	17.84	6.81	13.62	20.43	8.96	15.88	20.16	7.64	15.28	19.10
3	3.96	6.48	7.56	2.00	3.50	4.50	4.02	8.04	10.72	5.88	9.80	15.68	6.81	13.62	18.16	6.72	13.44	20.16	7.64	13.37	19.10
4	3.24	5.76	7.20	1.50	3.00	4.50	2.68	6.70	9.38	3.92	9.80	13.72	4.54	11.35	18.16	6.72	11.20	17.92	5.73	11.46	17.19
5	2.88	5.04	6.84	1.50	3.00	4.00	2.68	5.36	9.38	3.92	7.84	13.72	4.54	11.35	15.89	4.48	11.20	17.92	5.73	9.55	15.28
6	11.88	12.24	13.68	13.00	12.00	13.00	30.82	28.14	30.82	41.16	39.20	43.12	43.13	40.86	45.40	38.08	35.84	42.56	24.83	28.74	32.47
7	15.12	14.76	16.20	21.50	19.00	19.50	54.94	48.24	49.58	78.40	68.60	70.56	83.99	74.91	77.18	78.16	69.44	71.68	53.48	49.66	53.48
8	17.28	16.56	17.64	23.50	21.00	21.00	68.34	58.96	58.96	101.92	88.20	90.16	115.77	99.88	102.15	109.76	96.32	96.32	82.13	72.58	76.40
9	20.16	19.08	19.80	22.00	19.50	19.50	68.34	60.30	58.96	111.72	96.04	96.04	129.39	113.50	111.23	129.92	114.24	112.00	105.05	91.68	93.59
10	22.68	20.16	21.60	20.50	18.50	18.00	60.30	53.60	52.26	103.88	92.12	88.20	129.39	115.77	111.23	136.64	120.96	118.48	118.42	103.14	101.23
11	25.56	23.40	23.40	20.00	18.50	17.50	52.26	48.24	45.56	88.20	80.36	74.48	113.50	104.42	97.61	127.68	114.24	109.76	120.33	108.96	101.23
12	27.36	25.20	24.84	19.50	18.00	17.00	48.24	44.22	41.54	78.44	70.56	64.68	95.34	88.53	81.72	107.52	98.56	91.84	108.87	97.41	91.68
13	28.80	28.28	25.92	19.50	18.00	17.00	44.22	41.54	38.86	66.64	64.68	58.60	83.99	78.45	72.94	91.84	87.36	80.64	91.68	85.96	78.31
14	29.52	27.00	25.92	19.00	18.00	18.50	41.54	40.20	36.18	60.78	58.80	52.92	72.84	70.37	65.83	80.64	78.40	71.68	80.22	78.40	68.78
15	29.52	27.36	25.92	18.00	17.00	18.00	37.52	37.52	34.84	54.88	54.88	49.00	65.83	65.83	59.02	71.68	71.68	64.96	70.67	66.78	63.03
16	28.44	26.64	25.20	18.50	18.50	15.50	34.84	34.84	32.16	49.00	50.96	45.08	58.75	59.02	54.48	82.72	84.96	58.24	63.03	63.03	57.30
17	27.00	27.00	25.20	15.00	15.00	14.00	30.82	30.82	29.48	43.12	45.08	41.16	49.94	52.21	49.94	53.76	58.24	53.76	53.48	55.39	51.57
18	30.24	28.44	27.00	13.00	13.50	12.50	25.48	28.14	26.80	35.28	39.20	37.24	43.13	47.67	43.13	44.80	49.28	47.04	45.84	47.75	45.84
19	21.96	21.96	20.52	10.00	11.00	10.50	20.10	22.78	22.78	27.44	33.32	31.36	34.05	38.59	38.59	35.84	42.56	40.32	38.29	40.11	38.20
20	17.28	18.00	16.56	8.00	9.00	9.00	16.08	20.10	18.76	23.52	27.44	27.44	27.24	34.05	34.05	29.12	35.84	35.84	28.65	34.38	34.38
21	13.68	15.12	14.04	6.50	8.00	8.00	13.40	17.42	17.42	17.64	23.52	25.48	22.70	29.51	29.51	22.40	31.36	31.36	22.92	30.56	30.56
22	11.16	12.96	12.24	5.00	7.00	7.00	10.72	14.74	16.08	15.68	21.56	23.52	18.16	24.97	27.24	20.16	26.88	29.12	18.10	26.74	26.74
23	9.00	11.16	11.16	4.00	6.00	6.50	8.04	12.06	14.74	11.76	17.64	21.56	13.62	22.70	24.97	15.68	24.64	26.68	15.28	22.92	24.83
24	7.20	9.72	10.08	3.50	5.00	6.00	6.70	10.72	13.40	9.80	15.68	19.60	11.35	18.16	22.70	13.44	20.16	24.64	13.37	19.10	22.92

9.38	14.74	18.08	7.44	11.16	12.09	13.40	18.78	20.10	22.92	28.66	28.66	28.68	33.80	33.80	27.24	34.05	31.78	23.62	29.40	27.44	14.74	18.78	19.78	6.00	7.50	7.00
6.70	12.06	14.74	6.81	10.23	11.16	10.72	16.08	18.76	19.10	26.74	28.74	22.40	29.12	31.36	22.70	29.51	29.51	19.80	26.48	25.48	12.06	16.08	17.42	4.90	6.50	6.90
5.36	10.72	14.74	4.96	8.37	11.16	9.38	14.74	17.42	15.28	22.92	24.83	17.92	26.68	29.12	18.16	24.97	27.24	16.68	21.56	23.62	10.72	14.74	16.08	4.00	5.50	6.00
6.36	9.38	13.40	3.72	7.44	10.23	8.04	12.06	16.08	11.68	19.10	22.92	16.68	22.40	26.88	13.62	22.70	24.97	11.76	19.80	21.66	8.04	12.06	14.74	3.00	5.00	6.80
4.02	8.04	12.06	3.72	6.81	9.30	6.70	10.72	14.74	9.65	17.19	21.01	11.20	20.16	24.94	11.35	20.43	22.70	9.80	17.84	19.80	6.70	10.72	13.40	2.90	4.80	5.00
8.04	10.72	16.08	5.68	7.44	10.23	8.04	12.06	16.08	114.60	17.19	22.92	13.44	20.16	24.94	13.62	20.43	24.97	11.76	17.84	21.66	8.04	12.06	16.08	3.80	5.00	6.00
20.10	21.44	26.48	8.37	10.23	13.02	12.06	14.74	18.78	15.28	19.10	24.83	16.68	22.40	28.98	15.89	20.43	27.24	13.72	19.80	23.62	10.72	13.40	20.10	6.80	8.00	7.80
38.86	34.84	38.86	13.02	13.02	15.81	14.74	17.42	21.44	19.10	22.92	28.74	20.16	24.84	29.12	16.16	22.70	29.51	17.84	21.66	25.48	13.40	14.74	22.78	7.00	7.50	8.80
57.82	60.82	63.80	20.48	19.63	22.32	20.10	20.10	24.12	22.92	24.83	30.56	22.40	28.88	31.36	22.70	24.97	31.78	19.80	23.62	27.44	16.08	17.42	26.80	9.00	9.00	10.00
73.70	64.32	66.68	31.62	28.63	30.88	25.48	24.12	28.14	26.74	28.66	32.47	26.68	29.12	33.60	24.97	27.24	34.05	25.48	25.48	29.40	16.78	18.78	30.82	11.00	10.80	11.90
84.42	73.70	72.38	44.84	39.06	39.99	36.18	33.50	36.18	30.66	32.47	39.29	29.12	31.36	36.84	27.24	29.51	36.32	25.48	27.44	31.36	21.44	21.44	33.50	12.50	11.50	12.80
85.76	76.38	73.70	54.87	48.36	47.43	52.26	46.80	49.66	45.84	43.83	47.78	38.08	39.08	42.68	31.78	31.78	36.69	29.40	29.40	33.32	22.76	22.76	34.84	13.50	13.00	13.00
80.40	72.36	68.34	60.46	53.01	52.08	69.68	61.84	61.84	68.78	63.03	64.94	64.24	53.78	64.24	45.40	43.13	40.98	33.32	33.32	36.26	26.48	24.12	37.62	14.80	13.60	14.00
68.68	64.32	66.98	60.46	53.84	61.15	83.08	73.70	71.02	83.69	84.04	84.04	68.67	78.40	80.64	72.64	65.63	66.78	60.98	47.04	49.07	30.82	26.14	37.62	16.00	14.00	14.03
60.30	67.62	62.38	64.87	49.29	46.60	89.78	79.06	76.38	114.60	101.23	99.32	116.48	103.04	103.04	102.16	90.80	81.72	78.40	68.60	70.68	44.22	40.20	41.54	16.60	16.60	16.60
53.80	62.26	46.90	46.60	43.71	38.99	87.10	79.06	73.70	128.08	110.78	108.98	138.88	120.98	118.72	129.39	113.60	104.42	103.88	92.12	90.16	82.98	68.28	60.92	22.00	19.50	19.00
48.90	46.90	41.64	39.99	35.13	34.41	77.72	71.02	66.68	128.08	112.89	108.98	147.84	129.92	128.44	146.26	127.12	120.31	123.48	107.80	103.88	70.06	68.34	66.68	26.80	26.60	24.60
38.98	40.20	36.18	33.48	33.48	29.76	61.84	68.96	53.60	110.78	101.23	99.59	136.64	123.30	114.24	138.47	124.86	118.04	121.62	107.80	101.92	80.40	72.30	71.02	31.00	28.00	26.60
30.82	33.60	30.82	28.04	26.97	24.18	48.24	46.80	42.88	52.13	78.31	70.87	98.06	94.08	95.12	89.88	93.07	86.26	88.24	80.36	74.48	68.28	52.26	50.92	22.00	20.80	19.00
24.12	26.14	28.60	20.48	23.26	20.46	37.52	40.20	34.84	63.03	63.03	57.30	76.18	76.18	67.20	77.18	74.81	68.10	66.64	64.88	68.80	44.22	42.08	40.20	16.60	16.60	15.00
20.10	24.12	24.12	16.74	18.63	18.80	30.82	33.50	30.82	61.67	63.46	47.76	60.44	62.72	66.00	61.29	61.29	54.48	62.82	62.82	47.04	34.84	34.84	33.60	13.00	13.60	12.60
18.06	21.44	21.44	13.96	16.74	16.74	26.48	29.48	26.80	42.02	46.84	40.11	49.28	63.78	47.04	61.29	62.21	46.40	43.12	46.08	39.20	26.14	29.48	26.14	10.50	11.60	10.50
13.40	18.76	20.10	11.16	14.88	14.88	20.10	25.48	24.12	34.38	40.11	38.29	40.32	47.04	42.68	40.88	46.40	40.88	35.28	39.20	35.28	22.78	25.48	24.12	8.80	10.00	9.00
10.72	16.08	17.42	9.30	13.02	13.95	16.08	21.44	21.44	26.74	34.38	32.47	33.60	40.32	36.08	31.78	36.69	36.32	27.44	33.32	31.36	16.76	21.44	21.44	7.00	6.50	6.00

1	5.61	7.59	8.25	1.08	2.97	3.63	3.80	6.85	8.55	6.98	12.18	15.86	8.92	15.61	20.07	11.85	18.96	23.70	11.25	20.25	24.75
2	4.82	8.00	7.59	1.05	2.94	3.30	3.80	5.70	7.60	5.22	10.44	15.68	8.69	13.38	20.07	9.48	18.59	21.33	9.00	18.00	22.50
3	3.63	5.94	6.93	1.32	2.31	2.97	2.85	5.70	7.60	5.22	8.70	13.92	6.69	13.38	17.84	7.11	14.22	21.33	9.00	15.75	22.50
4	2.97	5.28	8.00	0.99	1.98	2.87	1.90	4.75	6.85	3.48	8.70	12.18	4.46	11.15	17.84	7.11	11.85	18.96	8.75	13.50	20.25
5	2.84	4.62	8.27	0.99	1.98	2.84	1.90	3.80	6.85	3.48	6.96	12.18	4.46	11.15	15.61	4.74	11.85	18.96	8.75	11.25	18.00
6	10.89	11.22	12.54	8.58	7.92	8.58	21.85	19.95	21.85	38.54	34.80	38.28	42.37	40.14	44.80	40.29	37.92	45.03	29.25	31.50	38.25
7	13.86	13.93	14.85	14.19	12.54	12.87	38.95	34.20	35.15	69.60	60.90	62.64	82.51	73.59	75.82	80.58	73.47	75.84	63.00	58.50	63.00
8	15.84	15.18	16.17	15.51	13.86	13.86	48.45	41.80	41.80	90.48	78.30	80.04	113.73	98.12	100.35	116.13	101.91	101.91	96.75	85.50	90.00
9	18.48	17.49	18.15	14.52	12.87	12.87	48.45	42.75	41.80	99.18	85.26	85.26	127.11	111.50	109.27	137.46	120.87	118.90	123.75	108.00	110.25
10	20.79	18.48	19.80	13.53	12.21	11.88	42.75	38.00	37.05	92.22	81.78	78.30	127.11	113.73	109.27	144.57	127.98	123.24	139.50	121.50	119.25
11	23.43	21.45	21.45	13.20	12.21	11.55	37.05	34.20	32.30	78.30	71.34	68.12	111.50	102.58	95.69	135.09	120.67	118.13	141.75	126.00	119.25
12	25.08	23.10	22.77	12.87	11.88	11.22	34.20	31.35	29.45	67.86	62.64	57.42	93.66	86.97	80.28	113.76	104.28	97.17	128.25	114.75	108.00
13	28.40	24.09	23.78	12.87	11.88	11.22	31.35	29.45	27.55	59.16	57.42	52.20	82.51	78.05	71.38	97.17	92.43	85.32	108.00	101.25	92.25
14	27.06	24.75	23.78	12.54	11.88	10.89	29.45	28.50	25.85	53.94	52.20	48.98	71.38	69.13	64.67	85.32	82.95	75.84	94.50	90.00	81.00
15	27.06	25.08	23.78	11.88	11.22	10.56	26.80	26.80	24.70	48.72	48.72	43.50	64.67	64.67	57.98	75.84	75.84	68.73	83.25	81.00	74.25
16	28.07	24.42	23.10	10.89	10.89	10.23	24.70	24.70	22.80	43.50	45.24	40.02	55.75	57.98	53.52	68.38	68.73	61.62	74.25	74.25	67.50
17	24.75	24.75	23.10	9.60	9.90	9.24	21.85	21.85	20.90	33.28	40.02	38.54	49.08	51.29	49.08	56.88	61.62	56.88	63.00	65.25	60.75
18	27.72	26.07	24.75	8.58	8.91	8.25	18.05	19.95	19.00	31.32	34.80	33.06	42.37	48.83	42.37	47.40	52.14	49.77	54.00	56.25	54.00
19	20.13	20.13	18.81	6.60	7.28	6.93	14.25	16.15	16.15	24.36	29.58	27.84	33.45	37.91	37.91	37.92	45.03	42.66	42.75	47.25	45.00
20	15.84	16.50	15.18	5.28	5.94	5.94	11.40	14.25	13.30	20.88	24.36	24.36	28.76	33.45	33.45	30.81	37.92	37.92	33.75	40.50	40.50
21	12.54	13.86	12.87	4.29	5.28	5.28	9.50	12.35	12.35	15.66	20.88	22.62	22.30	28.99	28.99	23.70	33.16	33.16	27.00	36.00	36.00
22	10.23	11.88	11.22	3.30	4.62	4.62	7.60	10.45	11.40	13.92	19.14	20.88	17.84	24.53	26.78	21.33	28.44	30.81	22.50	31.50	31.50
23	8.25	10.23	10.23	2.64	3.96	4.29	5.70	8.55	10.45	10.44	15.66	19.14	13.38	22.30	24.53	16.59	26.07	28.44	18.00	27.00	29.25
24	6.60	8.91	9.24	2.31	3.30	3.98	4.75	7.60	9.50	8.70	13.92	17.40	11.15	17.84	22.30	14.22	21.33	26.07	15.75	22.50	27.00

12.81	20.13	21.98	12.90	19.00	19.80	18.30	26.82	27.48	27.00	33.76	33.76	28.44	36.88	38.66	28.78	33.46	31.22	20.88	26.10	24.38	10.46	13.30	13.30	3.96	4.96	4.82
9.16	16.47	20.13	10.60	16.80	18.00	14.84	21.98	25.82	22.50	31.60	31.60	23.70	30.81	33.18	22.30	28.99	28.99	17.40	22.82	22.82	8.86	11.40	12.36	2.97	4.28	4.28
7.32	14.84	20.13	7.50	13.80	18.00	12.81	20.13	23.79	18.00	27.00	29.26	18.96	28.44	30.81	17.84	24.53	26.78	13.92	19.14	20.88	7.80	10.46	11.40	2.64	3.63	3.96
7.32	12.81	18.30	6.00	12.00	16.80	10.98	16.47	21.98	13.60	22.60	27.00	16.68	23.70	28.44	13.38	22.30	24.53	10.44	17.40	19.14	6.70	8.86	10.46	1.98	3.30	3.63
5.49	10.98	16.47	6.00	10.50	15.00	9.16	14.84	20.13	11.26	20.26	24.76	11.86	21.33	26.07	11.16	20.07	22.30	8.70	15.66	17.40	4.76	7.80	9.60	1.66	2.97	3.30
10.98	14.64	21.98	8.00	12.00	16.60	10.98	16.47	21.98	13.60	20.26	27.00	14.22	21.33	26.07	13.38	20.07	24.53	10.44	16.68	19.14	5.70	8.86	11.40	2.31	3.30	3.96
27.45	28.28	34.77	13.60	18.80	21.00	16.47	20.13	25.82	12.00	22.60	29.26	18.69	23.70	28.44	16.81	20.07	26.78	12.19	17.40	20.88	7.80	9.60	14.28	3.63	3.98	4.96
63.07	47.68	63.07	21.00	21.00	26.60	20.13	23.79	29.28	22.60	27.00	31.60	21.33	26.07	30.81	17.84	22.30	28.99	16.68	19.14	22.82	9.60	10.46	16.16	4.62	4.96	5.81
78.88	69.64	73.20	33.00	31.50	36.00	27.46	27.46	32.94	27.00	29.26	36.00	23.70	28.44	33.18	22.30	24.53	31.22	17.40	20.88	24.38	11.40	12.36	19.00	6.94	6.94	8.80
100.66	87.84	89.67	51.00	46.80	49.60	34.77	32.94	38.43	31.60	33.76	38.26	28.44	30.81	36.66	24.63	28.78	33.46	22.82	22.82	26.10	13.30	13.30	21.86	7.28	8.83	7.69
116.29	100.66	98.82	72.00	63.00	64.60	49.41	46.76	49.41	36.00	38.26	42.76	30.81	33.18	37.92	26.78	28.99	36.68	22.82	24.38	27.84	15.20	16.20	23.76	8.26	7.69	8.26
117.12	104.31	100.86	88.60	78.00	79.60	71.27	64.66	67.71	64.00	61.76	68.26	40.29	40.29	46.03	31.22	31.22	37.91	28.10	26.10	29.88	16.16	16.16	24.70	9.91	8.68	8.68
109.80	98.82	93.33	97.60	86.60	84.00	96.18	84.18	84.18	81.00	74.26	78.60	61.62	68.98	61.62	44.80	42.37	40.14	29.66	29.68	31.32	18.06	17.10	26.60	9.67	8.91	9.24
96.16	87.84	80.52	97.50	87.00	82.50	113.46	100.66	98.99	110.26	98.00	99.00	94.80	82.96	86.32	71.38	64.67	66.76	46.24	41.76	43.60	21.96	19.96	26.60	9.90	9.24	9.24
82.36	78.89	71.37	88.60	78.00	76.00	122.81	107.97	104.31	136.00	119.28	117.00	123.24	109.02	109.02	100.36	88.20	80.28	89.00	80.90	82.84	31.36	28.60	28.46	10.89	10.23	10.23
73.20	71.37	64.06	75.00	70.80	64.60	118.96	107.97	100.66	148.60	130.60	128.00	146.94	127.98	126.91	127.11	111.50	102.58	92.22	81.78	80.04	44.96	39.90	36.10	14.62	12.87	12.54
64.06	64.06	64.73	64.60	61.60	66.60	108.14	98.99	98.87	148.60	132.76	128.00	158.42	137.46	132.72	142.72	124.88	118.19	109.82	96.70	92.22	66.06	48.46	46.66	18.81	16.83	16.17
53.07	64.90	46.41	64.00	64.00	48.00	84.18	80.82	73.20	130.60	119.28	110.26	144.67	130.36	120.87	136.03	122.86	116.98	107.88	96.70	90.48	67.00	61.30	60.36	20.46	18.48	17.49
42.09	46.76	42.09	42.00	43.60	38.00	66.68	64.06	68.68	98.76	92.26	83.26	104.28	99.64	90.06	96.12	91.43	84.74	76.06	71.34	68.12	39.90	37.06	36.10	14.62	13.63	12.54
32.94	38.43	38.60	33.00	37.60	33.00	51.24	54.90	47.68	74.26	74.26	67.60	80.69	80.69	71.10	78.82	73.69	68.90	58.19	57.42	52.20	31.36	30.40	28.60	10.89	10.89	9.80
27.46	32.94	32.94	27.00	31.60	30.00	42.09	46.76	42.09	60.76	63.00	68.26	63.99	66.38	68.26	60.21	60.21	63.62	46.98	48.98	41.76	24.70	24.70	23.76	8.66	8.91	8.26
21.96	29.28	26.28	22.60	27.00	27.00	34.77	40.26	36.80	48.60	54.00	47.26	62.14	68.68	46.77	60.21	61.29	44.80	38.26	40.02	34.80	19.96	20.80	19.96	6.83	7.69	6.93
18.30	25.82	27.46	18.00	24.00	24.00	27.46	34.77	32.94	40.60	47.26	42.76	42.88	49.77	46.03	40.14	44.60	40.14	31.32	34.80	31.32	16.16	16.06	17.10	6.61	6.60	6.94
14.64	21.98	23.79	16.00	21.00	22.60	21.98	28.28	29.28	31.60	40.60	38.26	36.66	42.66	40.29	31.22	37.91	36.68	24.38	29.68	27.84	13.30	15.20	16.20	4.62	6.61	6.28

1	5.10	6.90	7.50	1.80	2.70	3.30	2.20	3.85	4.95	5.80	10.15	13.05	8.24	14.42	18.54	12.05	19.28	24.10	12.35	22.23	27.17
2	4.20	8.00	8.90	1.50	2.40	3.00	2.20	3.30	4.40	4.35	8.70	13.05	8.18	12.36	18.54	9.84	18.87	21.89	9.88	19.78	24.70
3	3.30	5.40	6.30	1.20	2.10	2.70	1.65	3.30	4.40	4.35	7.25	11.60	6.18	12.36	18.48	7.23	14.46	21.69	9.88	17.29	24.70
4	2.70	4.80	6.00	0.90	1.80	2.70	1.10	2.75	3.85	2.90	7.25	10.15	4.12	10.30	16.48	7.23	12.05	19.28	7.41	14.82	22.23
5	2.40	4.20	5.70	0.90	1.80	2.40	1.10	2.20	3.85	2.90	5.80	10.15	4.12	10.30	14.42	4.82	12.05	19.28	7.41	12.35	19.78
6	9.90	10.20	11.40	7.80	7.20	7.80	12.65	11.55	12.65	30.45	29.00	31.90	38.14	37.08	41.20	40.97	38.58	45.79	32.11	34.58	41.99
7	12.60	12.30	13.50	12.90	11.40	11.70	22.55	19.80	20.35	58.00	50.75	52.20	78.22	67.98	70.04	81.94	74.71	77.12	69.16	84.22	69.16
8	14.40	13.80	14.70	14.10	12.80	12.60	28.05	24.20	24.20	75.40	65.25	66.70	105.08	90.64	92.70	118.09	103.63	103.63	106.21	93.86	98.80
9	16.80	15.90	16.50	13.20	11.70	11.70	28.05	24.75	24.20	82.65	71.05	71.05	117.42	103.00	100.94	139.78	122.91	120.50	135.85	118.56	121.03
10	18.90	18.80	18.00	12.30	11.10	10.80	24.75	22.00	21.45	78.85	68.15	65.25	117.42	105.08	100.94	147.01	130.14	125.32	153.14	133.38	130.91
11	21.30	19.50	19.50	12.00	11.10	10.50	21.45	19.80	18.70	65.25	59.45	55.10	103.00	94.78	88.58	137.37	122.91	118.09	155.61	138.32	130.91
12	22.80	21.00	20.70	11.70	10.80	10.20	19.80	18.15	17.05	58.55	52.20	47.85	88.52	80.34	74.18	115.68	106.04	98.81	140.79	125.67	118.58
13	24.00	21.00	21.60	11.70	10.80	10.20	18.15	17.05	15.95	49.30	47.85	43.50	78.22	72.10	65.92	98.81	93.99	86.78	118.56	111.15	101.27
14	24.60	22.50	21.60	11.40	10.80	9.90	17.05	16.50	14.85	44.95	43.50	38.15	65.92	63.86	59.74	88.78	84.35	77.12	103.74	98.80	88.92
15	24.60	22.80	21.60	10.80	10.20	9.60	15.40	15.40	14.30	40.60	40.60	36.25	59.74	59.74	53.56	77.12	77.12	69.89	91.39	88.92	81.51
16	23.70	22.20	21.00	9.90	9.90	9.30	14.30	14.30	13.20	36.25	37.70	33.35	51.50	53.56	49.44	67.48	69.89	62.66	81.51	81.51	74.10
17	22.50	22.50	21.00	9.00	9.00	8.40	12.65	12.65	12.10	31.90	33.35	30.45	45.32	47.38	45.32	57.84	62.66	57.84	69.16	71.83	66.69
18	25.20	23.70	22.50	7.80	8.10	7.50	10.45	11.55	11.00	26.10	29.00	27.55	39.14	43.26	39.14	48.20	53.02	50.61	59.28	61.75	59.28
19	18.30	18.30	17.10	6.00	6.00	6.30	8.25	9.35	9.35	20.30	24.65	23.20	30.90	35.02	35.02	38.56	45.79	43.38	46.93	51.87	46.40
20	14.40	15.00	13.80	4.80	5.40	5.40	6.60	8.25	7.70	17.40	20.30	20.30	24.72	30.90	30.90	31.33	38.56	38.56	37.05	44.48	44.48
21	11.40	12.60	11.70	3.90	4.80	4.80	5.50	7.15	7.15	13.05	17.40	18.65	20.60	26.78	26.78	24.10	33.74	33.74	29.64	39.52	39.52
22	9.30	10.80	10.20	3.00	4.20	4.20	4.40	6.05	6.00	11.60	15.95	17.40	16.48	22.68	24.72	21.69	28.92	31.33	24.70	34.58	34.58
23	7.50	9.30	9.30	2.40	3.60	3.60	3.30	4.95	6.05	6.70	13.05	15.95	12.36	20.60	22.68	16.67	25.51	28.92	19.78	29.64	32.11
24	6.00	8.10	8.40	2.10	3.00	3.60	2.75	4.40	5.50	7.25	11.60	14.50	10.30	16.48	20.60	14.48	21.69	25.51	17.29	24.70	29.64

16.40	24.20	26.40	15.60	23.62	26.40	22.00	30.80	33.00	28.84	37.06	37.06	28.82	38.16	38.16	24.72	30.90	28.84	17.40	21.76	20.38	6.06	7.70	7.70	3.80	4.60	4.20
11.60	19.80	24.20	13.72	21.66	23.62	17.80	26.40	30.80	24.70	34.68	34.68	24.10	31.33	33.74	20.60	26.78	26.78	14.60	16.96	18.96	4.86	6.80	7.16	2.70	3.80	3.80
8.80	17.80	24.20	8.90	17.94	23.62	16.40	24.20	28.80	18.78	29.84	32.11	18.28	26.82	31.33	16.48	22.68	24.72	11.60	16.96	17.40	4.40	6.06	6.60	2.40	3.30	3.80
6.80	16.40	22.00	7.84	16.68	21.66	13.30	18.80	26.40	14.62	24.70	29.64	16.97	24.10	26.82	12.36	20.60	22.68	6.70	14.60	16.96	3.30	4.86	6.06	1.80	3.00	3.30
6.60	13.20	18.80	7.84	13.72	18.80	11.60	17.60	24.20	12.35	22.23	27.17	12.06	21.69	26.81	10.30	16.54	20.60	7.26	13.06	14.60	2.76	4.40	6.50	1.50	2.70	3.00
13.20	17.60	26.40	11.76	16.68	21.66	13.20	18.80	26.40	14.60	22.23	28.84	14.48	21.69	26.81	12.36	18.54	22.68	6.70	13.06	16.96	3.30	4.86	6.80	2.10	3.00	3.80
33.00	36.20	41.90	17.84	21.66	27.44	18.80	24.20	30.80	18.78	24.70	32.11	18.87	24.10	26.82	14.42	18.54	24.72	10.16	14.60	17.40	4.40	6.60	8.25	3.30	3.60	4.50
83.80	57.28	83.80	22.44	27.44	33.32	24.20	28.80	36.20	24.70	28.84	34.68	21.69	26.81	31.33	16.48	20.80	26.78	13.06	16.96	18.96	6.00	6.06	9.36	4.20	4.50	6.70
94.80	83.80	93.90	43.12	41.16	47.94	33.00	33.00	38.80	28.84	32.11	38.92	24.10	26.82	33.74	26.80	22.86	28.84	14.50	17.40	20.38	6.00	7.16	11.90	5.40	6.40	8.00
121.00	106.60	107.80	88.84	60.78	84.68	41.90	38.80	46.20	34.68	37.06	41.98	28.82	31.33	36.16	22.68	24.72	30.90	18.86	18.96	21.76	7.70	7.70	12.86	6.60	8.30	6.80
138.00	121.00	149.80	94.08	82.32	84.28	66.40	66.00	68.40	38.82	41.98	46.83	31.33	33.74	38.66	24.72	26.78	32.96	18.86	20.38	23.20	8.00	8.80	13.76	7.60	6.80	7.80
146.80	126.40	121.90	116.84	101.92	89.88	86.80	77.80	81.40	68.28	68.81	61.76	40.87	40.87	46.78	28.84	28.84	36.02	21.76	21.76	24.66	9.36	9.36	14.30	8.10	7.80	7.80
132.00	118.80	112.20	127.40	111.72	108.78	114.40	101.20	101.20	68.82	81.61	83.88	82.68	67.84	82.68	41.20	38.14	37.08	24.66	24.66	26.10	10.46	9.90	16.40	8.70	8.10	8.40
114.40	106.60	99.60	127.40	113.68	107.30	136.40	121.00	118.80	121.00	108.89	108.89	86.40	84.36	86.78	66.82	60.74	61.60	37.70	34.80	38.28	12.66	11.66	16.40	8.00	8.40	8.40
98.00	94.80	86.80	116.84	103.88	98.00	147.40	128.80	126.40	146.20	130.81	128.44	106.32	110.86	110.86	92.70	82.40	74.18	68.00	68.76	62.20	16.16	16.60	17.05	8.90	9.30	9.30
86.00	86.00	77.00	96.00	82.12	84.28	143.00	128.80	121.00	163.02	143.28	138.32	148.42	130.14	127.73	117.42	103.00	94.78	78.86	68.16	68.70	26.06	23.96	20.80	13.26	11.70	11.40
77.00	77.00	68.20	94.28	80.38	73.62	127.80	116.80	107.80	163.02	146.73	138.32	169.08	138.78	134.98	131.84	116.38	106.18	91.36	78.76	78.86	32.46	28.06	26.86	17.16	16.30	14.70
63.00	68.00	58.40	78.68	70.66	62.72	101.20	96.80	86.00	143.28	130.81	121.03	147.01	132.56	122.81	126.66	113.30	107.12	88.90	78.76	74.40	33.00	28.70	28.16	18.60	18.80	16.90
60.80	56.00	60.80	64.86	66.54	60.86	78.20	77.00	70.40	106.21	101.27	91.38	108.04	101.22	91.68	90.64	84.46	78.26	63.86	68.46	65.16	23.10	21.46	20.80	13.26	12.30	11.40
39.80	46.20	44.00	43.12	48.00	43.12	81.60	68.00	67.20	81.61	81.61	74.10	81.84	81.84	72.30	70.84	67.98	61.80	49.30	47.86	43.60	18.16	17.80	16.60	9.90	9.90	8.00
33.80	38.60	38.60	36.28	41.18	38.20	66.80	66.80	60.60	68.68	68.18	61.76	65.07	67.48	60.26	66.82	66.82	49.44	38.16	38.16	34.80	14.30	14.30	13.76	7.80	8.10	7.60
28.40	36.20	36.20	28.40	36.28	36.28	41.80	48.40	44.00	64.34	69.28	61.87	63.02	67.84	60.81	66.82	47.38	41.20	31.90	33.30	28.90	11.66	12.10	11.66	6.30	6.90	6.30
22.00	30.80	33.00	23.62	31.38	31.38	33.00	41.80	38.60	44.48	61.87	48.92	43.38	60.81	48.78	37.08	41.20	37.08	28.10	28.00	26.10	8.36	10.46	9.90	6.10	6.00	6.40
17.80	26.40	28.60	18.80	27.44	28.40	26.40	36.20	36.20	34.68	44.46	41.98	38.16	43.38	40.87	28.84	36.02	32.86	20.30	24.66	23.20	7.70	8.80	8.90	4.20	6.10	4.80

จุฬาลงกรณ์มหาวิทยาลัย

1	4.93	6.67	7.25	1.74	2.81	3.19	1.64	2.87	3.69	5.28	9.24	11.88	7.92	13.66	17.62	12.05	18.28	24.10	12.70	22.86	27.94
2	4.06	5.80	6.67	1.45	2.32	2.90	1.64	2.46	3.28	3.96	7.92	11.88	5.94	11.88	17.82	9.64	16.67	21.89	10.16	20.32	25.40
3	3.19	5.22	6.09	1.16	2.03	2.61	1.23	2.46	3.28	3.96	6.60	10.56	5.94	11.88	15.84	7.23	14.46	21.89	10.16	17.78	25.40
4	2.61	4.64	5.80	0.87	1.74	2.61	0.82	2.05	2.67	2.84	6.60	9.24	3.96	9.90	15.84	7.23	12.05	19.28	7.62	15.24	22.86
5	2.32	4.06	5.51	0.87	1.74	2.32	0.82	1.64	2.67	2.84	5.28	9.24	3.96	9.90	13.66	4.82	12.05	19.28	7.62	12.70	20.32
6	9.57	9.66	11.02	7.54	6.96	7.54	9.43	8.61	9.43	27.72	26.40	29.04	37.62	35.64	39.60	40.97	35.56	45.79	33.02	35.56	43.18
7	12.16	11.89	13.05	12.47	11.02	11.31	16.81	14.76	15.17	52.80	46.20	47.52	73.26	65.34	67.32	81.94	74.71	77.12	71.12	66.04	71.12
8	13.92	13.34	14.21	13.83	12.18	12.18	20.91	18.04	18.04	66.64	58.40	60.72	100.96	87.12	89.10	118.09	103.83	103.83	108.22	96.52	101.80
9	16.24	15.37	15.95	12.76	11.31	11.31	20.91	18.46	18.04	75.24	64.68	64.68	112.88	99.00	97.02	139.78	122.91	120.60	136.70	121.92	124.46
10	18.27	18.24	17.40	11.89	10.73	10.44	18.45	16.40	15.99	69.96	62.04	58.40	112.88	100.98	97.02	147.01	130.14	125.32	157.48	137.16	134.82
11	20.59	18.85	18.85	11.80	10.73	10.15	15.99	14.76	13.94	59.40	54.12	50.16	99.00	91.08	85.14	137.37	122.91	118.09	160.02	142.24	134.82
12	22.04	20.30	20.01	11.31	10.44	9.86	14.78	13.53	12.71	51.48	47.52	43.56	83.16	77.22	71.26	115.68	106.04	98.61	144.78	129.54	121.92
13	23.20	21.17	20.88	11.31	10.44	9.66	13.53	12.71	11.89	44.88	43.56	39.80	73.26	69.30	63.36	98.61	93.99	86.76	121.92	114.30	104.14
14	23.78	21.75	20.88	11.02	10.44	9.57	12.71	12.30	11.07	40.92	38.60	35.64	63.36	61.38	57.42	86.78	84.35	77.12	106.68	101.80	91.44
15	23.78	22.04	20.88	10.44	9.86	9.28	11.48	11.48	10.66	36.96	36.96	33.00	57.42	57.42	51.48	77.12	77.12	69.89	93.96	91.44	83.82
16	22.91	21.46	20.30	9.57	9.57	8.99	10.66	10.66	9.84	33.00	34.32	30.36	48.60	51.48	47.52	67.48	69.89	62.66	83.82	83.82	78.20
17	21.75	21.75	20.30	8.70	8.70	8.12	9.43	9.43	9.02	29.04	30.36	27.72	43.56	45.54	43.56	57.84	62.66	57.84	71.12	73.66	68.58
18	24.38	22.91	21.75	7.54	7.83	7.25	7.79	8.61	8.20	23.78	26.40	25.08	37.62	41.58	37.62	48.20	53.02	50.61	60.96	63.50	60.96
19	17.69	17.69	16.53	6.80	6.35	6.09	6.15	6.97	6.97	18.48	22.44	21.12	29.70	33.66	33.66	35.56	45.79	43.38	48.26	53.34	50.80
20	13.92	14.50	13.34	4.64	5.22	5.22	4.92	6.15	5.74	16.84	18.48	18.48	23.78	29.70	29.70	31.33	38.56	38.56	38.10	46.72	46.72
21	11.02	12.18	11.31	3.77	4.64	4.64	4.10	5.33	5.33	11.88	15.84	17.16	19.80	25.74	25.74	24.10	33.74	33.74	30.48	40.84	40.84
22	8.99	10.44	9.86	2.90	4.06	4.06	3.28	4.51	4.02	10.56	14.62	15.94	15.84	21.78	23.78	21.69	28.92	31.33	25.40	35.56	35.56
23	7.25	8.99	8.99	2.32	3.48	3.77	2.48	3.69	4.51	7.92	11.88	14.52	11.88	19.80	21.78	16.87	26.51	28.92	20.32	30.48	33.02
24	5.80	7.83	8.12	2.03	2.90	3.48	2.05	3.28	4.10	6.60	10.56	13.20	9.90	15.84	19.80	14.46	21.69	26.51	17.78	25.40	30.48

16.31	25.63	27.98	16.98	25.44	27.58	23.30	32.82	34.95	30.48	38.10	38.10	28.82	38.15	38.15	23.78	29.70	27.72	15.84	18.80	18.48	4.51	5.74	5.74	3.48	4.35	4.08
11.85	20.97	25.63	14.84	23.32	25.44	18.84	27.96	32.82	25.40	35.56	35.56	24.10	31.33	33.74	18.80	25.74	25.74	13.20	17.16	17.16	3.89	4.92	5.33	2.81	3.77	3.77
9.32	18.84	25.63	10.80	18.06	25.44	16.31	25.63	30.29	20.32	30.48	33.02	18.28	28.82	31.33	15.84	21.78	23.78	10.56	14.52	15.84	3.28	4.51	4.92	2.32	3.19	3.48
9.32	18.31	23.30	8.48	16.98	23.32	13.98	20.97	27.96	15.24	25.40	30.48	18.87	24.10	28.92	11.88	18.80	21.78	7.92	13.20	14.52	2.46	3.69	4.51	1.74	2.90	3.19
6.99	13.98	20.97	8.48	14.84	21.20	11.85	18.84	25.63	12.70	22.86	27.94	12.05	21.89	26.51	8.90	17.82	18.80	6.00	11.88	13.20	2.05	3.28	4.10	1.45	2.81	2.80
13.98	18.84	27.96	12.72	16.98	23.32	13.98	20.97	27.96	152.40	22.86	30.48	14.46	21.89	26.51	11.88	17.82	21.78	7.92	11.88	14.52	2.46	3.69	4.92	2.83	2.90	3.48
34.95	37.28	44.27	19.06	23.32	28.66	20.97	25.63	32.82	20.32	25.40	33.02	16.87	24.10	28.92	13.98	17.82	23.78	9.24	13.20	15.84	3.28	4.10	6.15	3.19	3.48	4.35
67.57	69.58	67.57	29.86	29.86	36.04	25.83	30.29	37.28	25.40	30.48	35.56	21.89	28.51	31.33	15.84	18.80	25.74	11.88	14.52	17.16	4.10	4.51	6.97	4.08	4.35	4.93
100.19	98.54	93.20	46.84	44.52	50.89	34.95	34.95	41.94	30.48	33.02	46.84	24.10	28.82	33.74	16.80	21.78	27.72	13.20	15.84	18.48	4.92	5.33	8.20	5.22	5.22	5.90
128.15	111.84	114.17	72.08	65.72	69.96	44.27	41.94	48.83	35.56	38.10	43.18	28.82	31.33	38.15	21.78	23.78	29.70	17.16	17.16	19.80	5.74	5.74	9.43	6.38	6.09	6.87
148.79	128.15	125.82	101.76	98.04	91.16	62.91	58.25	62.91	40.84	43.18	48.26	31.33	33.74	38.56	23.78	25.74	31.68	17.16	18.48	21.12	6.58	6.58	10.25	7.25	6.97	7.25
148.12	132.81	128.15	125.08	110.24	106.12	90.87	91.55	88.21	60.96	58.42	63.50	40.97	40.97	45.79	27.72	27.72	33.66	19.80	19.80	22.44	6.97	6.97	10.86	7.83	7.54	7.54
138.80	125.82	118.83	137.80	128.84	118.72	121.19	107.19	107.19	91.44	82.82	88.39	62.88	57.84	62.88	38.80	37.62	35.84	22.44	22.44	23.78	7.79	7.38	11.48	8.41	7.83	8.12
121.16	111.84	102.52	137.80	122.98	116.80	144.46	128.15	123.49	124.46	111.78	111.78	96.40	84.35	88.78	63.38	57.42	49.50	34.32	31.68	33.00	9.43	8.81	11.48	8.70	8.12	8.12
104.85	100.19	90.87	125.08	112.36	106.00	156.11	137.47	132.81	152.40	134.82	132.06	125.32	110.88	110.88	88.10	78.20	71.28	52.80	48.20	47.52	13.53	12.30	12.71	8.57	8.99	8.99
83.20	90.87	81.55	106.00	98.84	91.16	151.45	137.47	128.15	167.84	147.32	142.24	148.42	136.14	127.73	112.86	99.00	91.08	69.96	62.94	66.72	18.27	17.22	15.58	12.78	11.31	11.02
81.55	81.55	72.23	91.16	88.82	78.44	135.14	123.49	114.17	167.84	148.88	142.24	158.06	136.78	134.98	126.72	110.88	104.94	83.16	72.80	69.89	24.19	20.91	20.09	16.53	14.78	14.21
67.57	69.90	62.91	76.32	78.32	67.84	107.18	102.52	93.20	147.32	134.82	124.46	147.01	132.55	122.91	126.78	108.90	102.96	61.84	72.80	68.84	24.90	22.14	21.73	17.88	16.24	15.37
53.59	58.25	53.59	59.38	61.48	55.12	83.88	81.55	74.58	108.22	104.14	93.88	108.04	101.22	91.58	87.12	81.16	75.24	58.08	54.12	50.16	17.22	15.90	15.58	12.78	11.08	11.02
41.94	48.93	46.80	46.84	53.00	46.84	65.24	66.90	60.58	93.82	93.82	78.20	81.94	81.94	72.30	67.32	65.34	58.40	44.88	43.56	39.80	13.53	13.12	12.30	9.57	9.57	9.70
34.95	41.94	41.94	38.16	44.52	42.40	53.59	58.25	53.59	66.58	71.12	63.50	65.07	67.48	60.25	53.48	53.48	47.52	35.84	35.84	31.68	10.86	10.86	10.25	7.54	7.83	7.25
27.98	37.28	37.28	31.80	38.16	38.16	44.27	51.29	46.80	55.88	60.96	53.34	53.02	57.84	50.81	51.46	45.54	39.90	29.04	30.36	26.40	8.61	8.02	8.61	6.09	6.67	6.09
23.30	32.82	34.95	25.44	33.92	33.92	34.95	44.27	41.94	45.72	53.34	48.26	43.38	50.81	45.79	35.64	38.80	35.84	23.78	26.40	23.78	6.97	7.79	7.38	4.93	5.80	5.22
18.84	27.96	30.29	21.20	29.88	31.80	27.98	37.28	37.28	35.59	45.72	43.18	38.15	43.39	40.97	27.72	33.89	31.89	18.48	22.44	21.12	5.74	6.58	6.58	4.08	4.93	4.84

CLFxSHGF	N	NE	E	SE	S	SW	W	NW	Hor
16 N Lat									
Jan	22.5	12.65	48.3	72.79	81.59	148.09	117.6	28.05	166.16
Feb	24.75	22.08	53.13	67.57	63.14	137.47	129.36	48.96	184.25
Mar	26.25	32.2	54.97	57.13	38.13	116.23	133.84	71.4	194.97
Apr	29.25	39.56	52.21	43.5	18.45	88.5	127.12	87.72	193.63
May	39	43.47	49.45	33.35	16.81	67.85	120.4	96.39	188.94
June	49.5	44.62	47.61	28.71	16.81	58.41	115.92	98.94	185.59
July	41.25	43.01	48.3	32.19	17.22	65.49	117.6	95.37	185.59
Aug	30.75	38.64	50.37	41.47	18.86	84.37	122.64	85.68	188.94
Sep	27	30.82	52.21	55.39	38.13	112.69	127.12	68.34	188.94
Oct	24.75	21.85	51.29	65.25	61.5	132.75	124.88	48.45	180.9
Nov	22.5	12.65	47.38	71.63	80.36	145.73	115.36	28.05	164.82
Dec	21.75	9.43	45.54	73.66	86.92	149.86	110.88	20.91	156.78

CLF x SHGF Glass	N	NE	E	SE	S	SW	W	NW
	26.25	32.2	54.97	57.13	38.13	116.23	133.84	71.4
SC								
2	52.50	64.40	109.94	114.26	76.26	232.46	267.68	142.80
1.9	49.88	61.18	104.44	108.55	72.45	220.84	254.30	135.66
1.8	47.25	57.96	98.95	102.83	68.63	209.21	240.91	128.52
1.7	44.63	54.74	93.45	97.12	64.82	197.59	227.53	121.38
1.6	42.00	51.52	87.95	91.41	61.01	185.97	214.14	114.24
1.5	39.38	48.30	82.46	85.70	57.20	174.35	200.76	107.10
1.4	36.75	45.08	76.96	79.98	53.38	162.72	187.38	99.96
1.3	34.13	41.86	71.46	74.27	49.57	151.10	173.99	92.82
1.2	31.50	38.64	65.96	68.56	45.76	139.48	160.61	85.68
1.1	28.88	35.42	60.47	62.84	41.94	127.85	147.22	78.54
1	26.25	32.20	54.97	57.13	38.13	116.23	133.84	71.40
0.9	23.63	28.98	49.47	51.42	34.32	104.61	120.46	64.26
0.8	21.00	25.76	43.98	45.70	30.50	92.98	107.07	57.12
0.7	18.38	22.54	38.48	39.99	26.69	81.36	93.69	49.98
0.6	15.75	19.32	32.98	34.28	22.88	69.74	80.30	42.84
0.5	13.13	16.10	27.49	28.57	19.07	58.12	66.92	35.70
0.4	10.50	12.88	21.99	22.85	15.25	46.49	53.54	28.56
0.3	7.88	9.66	16.49	17.14	11.44	34.87	40.15	21.42
0.2	5.25	6.44	10.99	11.43	7.63	23.25	26.77	14.28
0.1	2.63	3.22	5.50	5.71	3.81	11.62	13.38	7.14

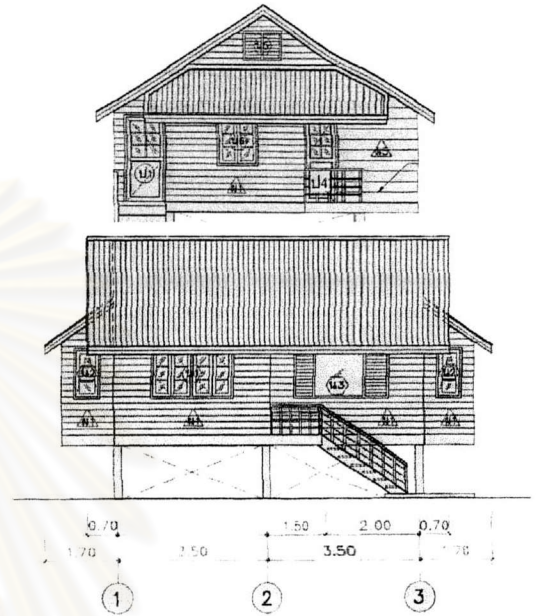
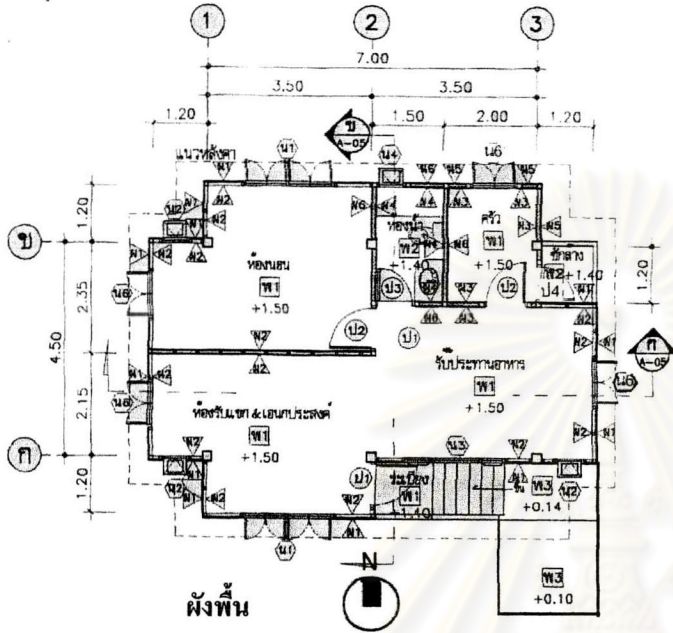


ภาคผนวก ข

ศูนย์วิทยทรัพยากร
จุฬาลงกรณ์มหาวิทยาลัย

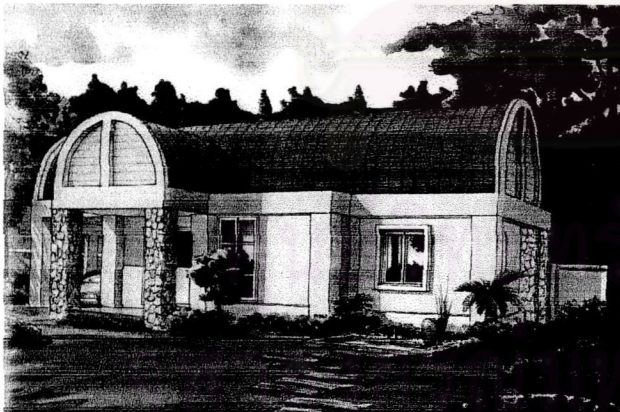
แบบบ้านที่ใช้ประกอบการคำนวณภาระการทำความเย็น

1. บ้านเดี่ยวแบบประหยัด 2 พื้นที่ใช้งาน 53 ตารางเมตร

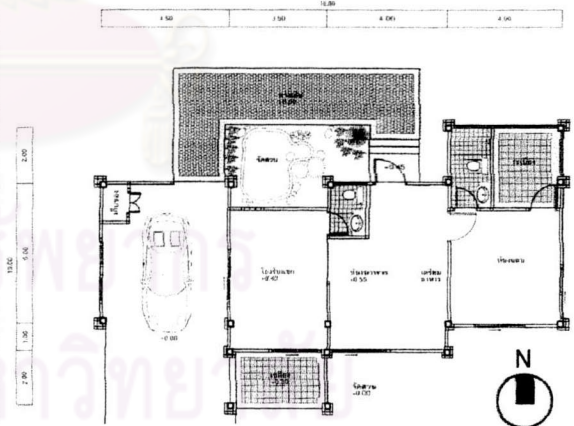


รูปด้านทิศใต้

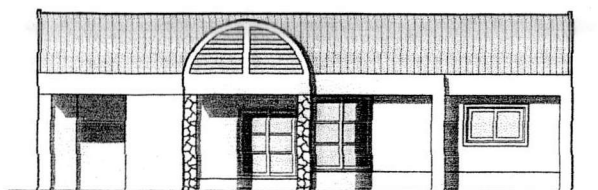
2. บ้านเดี่ยวเรือนเล็ก พื้นที่ใช้งาน 54 ตารางเมตร



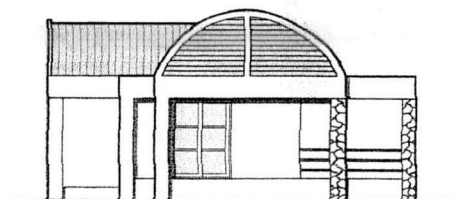
ทัศนียภาพ



ผังพื้น



รูปด้านทิศใต้

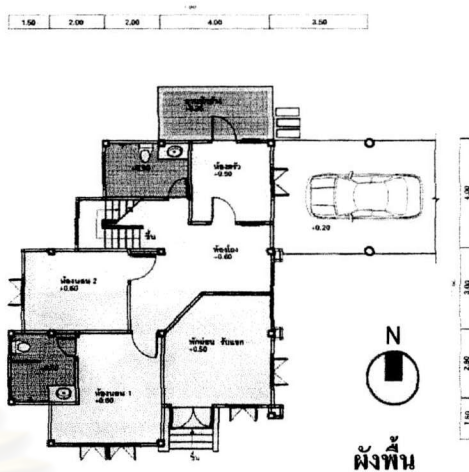


รูปด้านทิศตะวันออก

3. บ้านลอยชายชั้นครึ่ง พื้นที่ใช้งาน 80 ตารางเมตร



ทัศนียภาพ



ผังพื้น

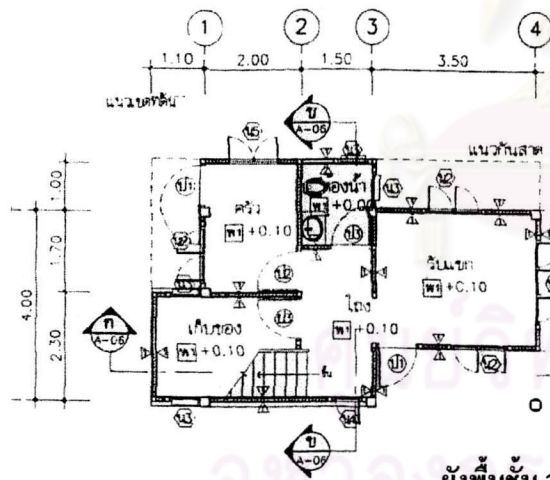


รูปด้านทิศใต้

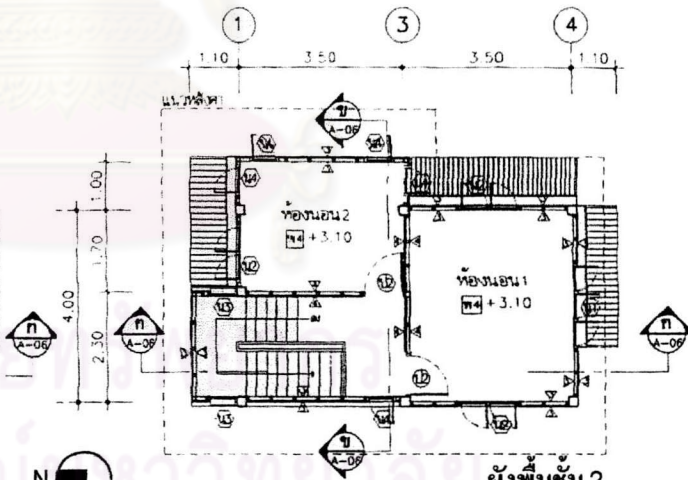


รูปด้านทิศตะวันออก

4. บ้านเดี่ยวแบบประหยัด 3 พื้นที่ใช้งาน 80 ตารางเมตร



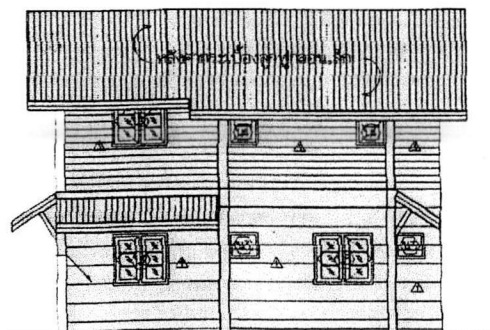
ผังพื้นชั้น 1



ผังพื้นชั้น 2

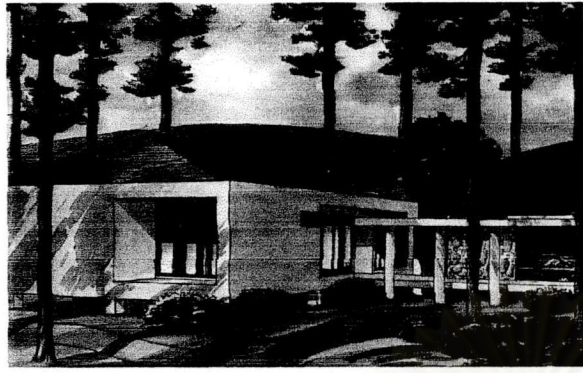


รูปด้านทิศใต้

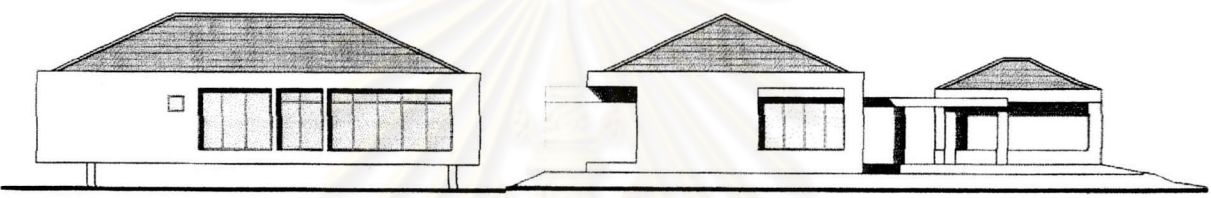
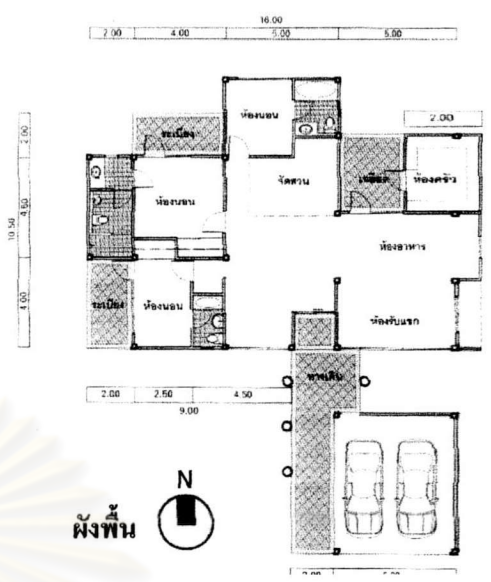


รูปด้านทิศตะวันออก

5. บ้านเบิกบาน พื้นที่ใช้งาน 46 ตารางเมตร



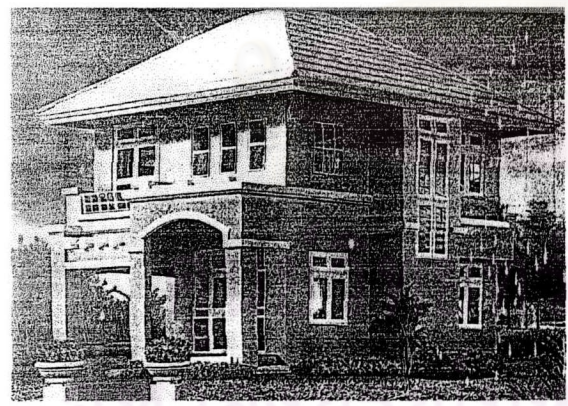
ทัศนียภาพ



รูปด้านทิศใต้

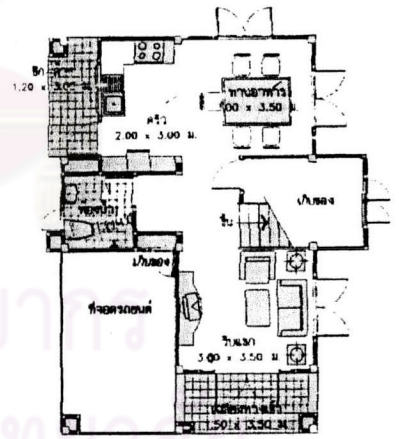
รูปด้านทิศตะวันตก

6. บ้านเรนโบว์ พื้นที่ใช้งาน 102.25 ตารางเมตร

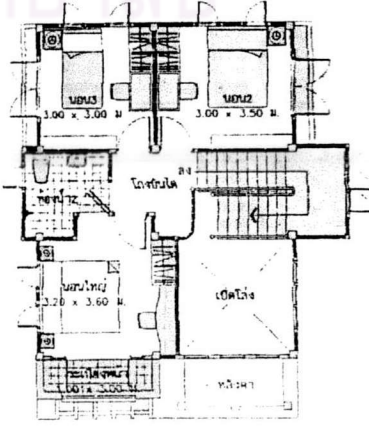


ทัศนียภาพ

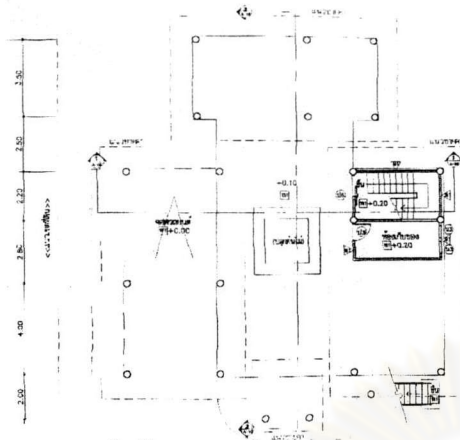
ผังพื้นที่ 1



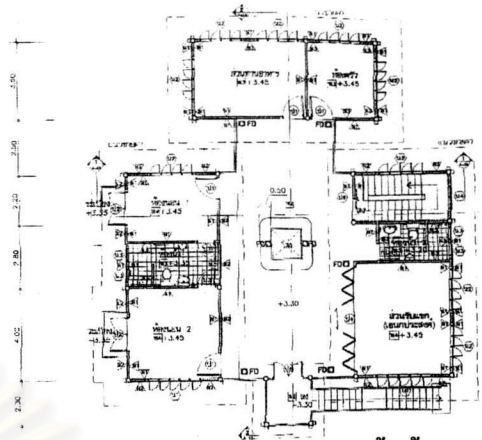
ผังพื้นที่ 2



7. บ้านไทยอนุรักษ์ไทยภาคกลาง พื้นที่ใช้งาน 105.30 ตารางเมตร



ผังพื้นที่ 1



ผังพื้นที่ 2

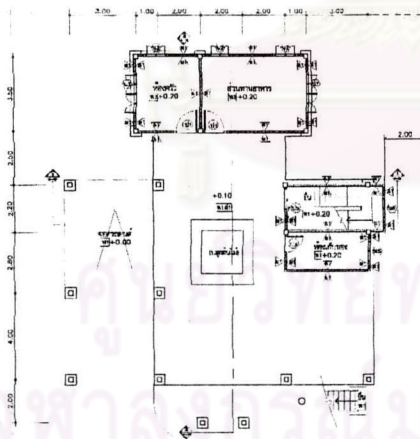


รูปด้านทิศใต้

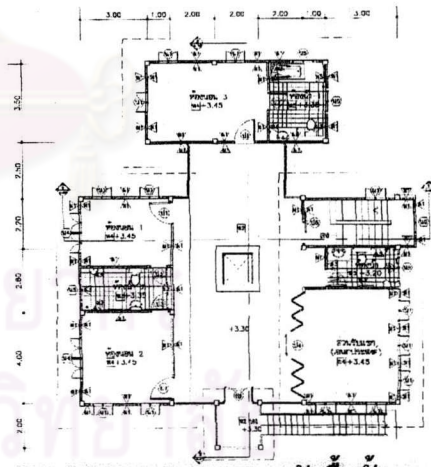


รูปด้านทิศตะวันตก

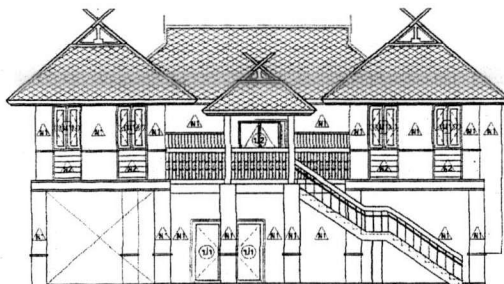
8. บ้านไทยอนุรักษ์ไทยภาคเหนือ พื้นที่ใช้งาน 132.50 ตารางเมตร



ผังพื้นที่ 1



ผังพื้นที่ 2

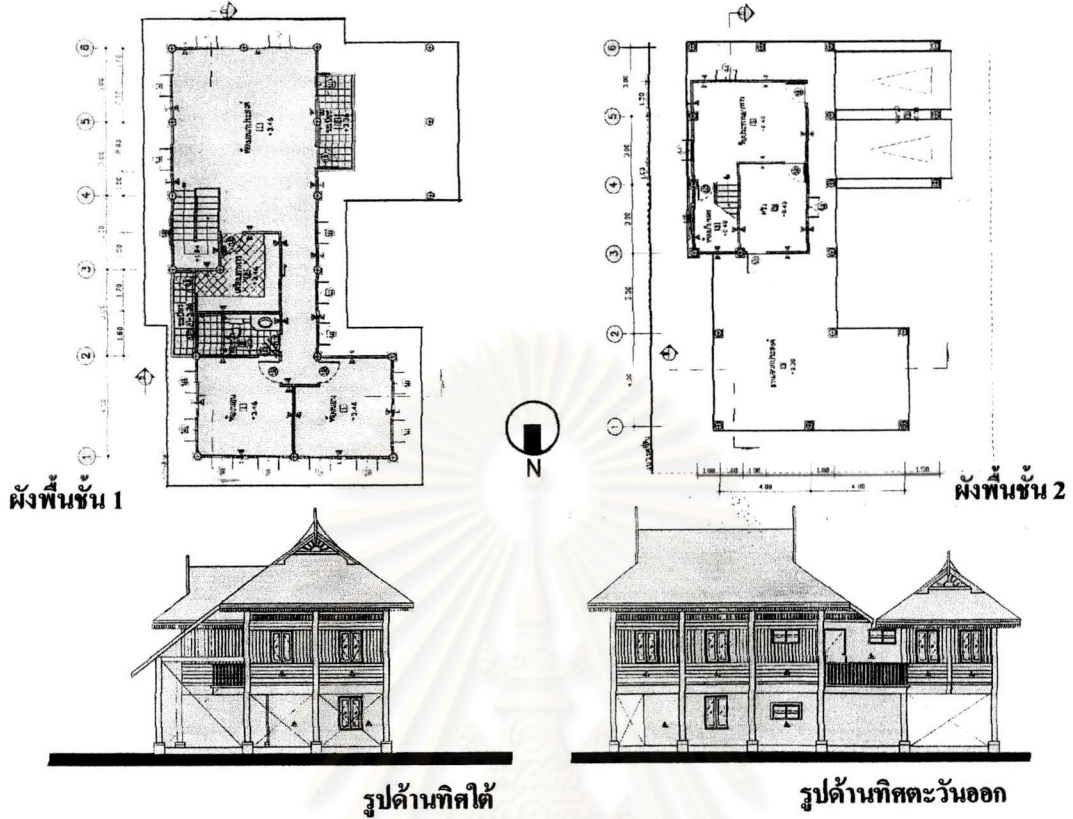


รูปด้านทิศใต้

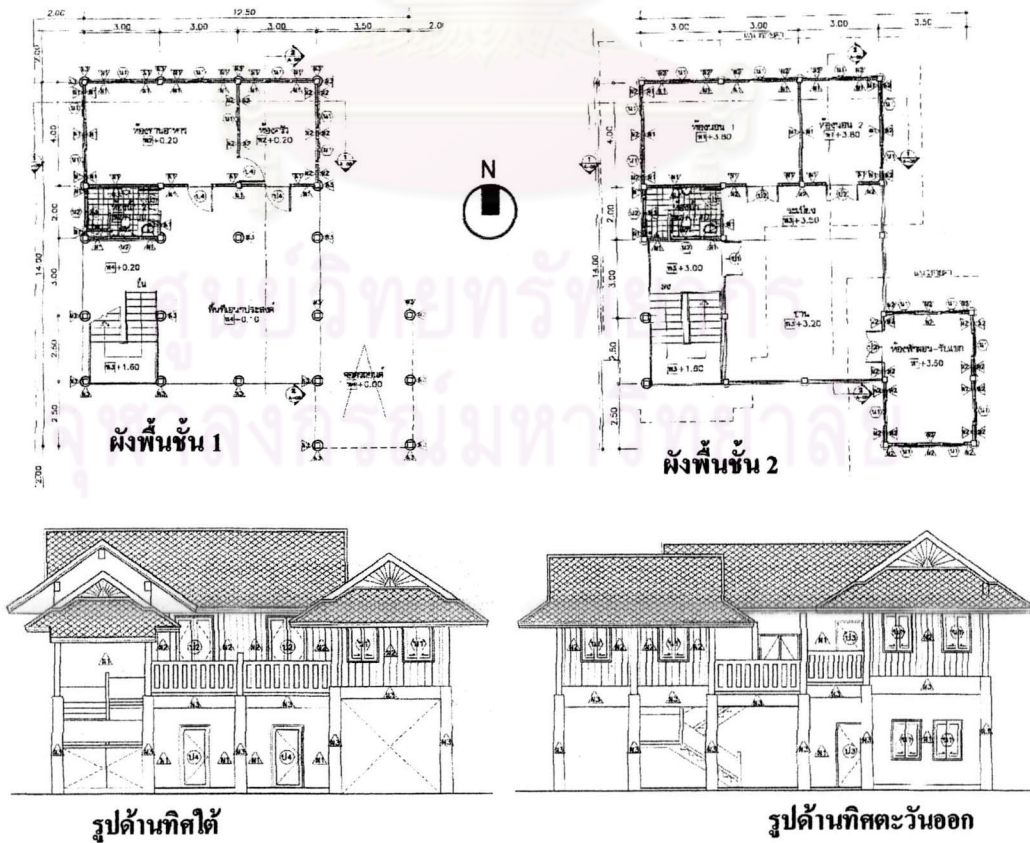


รูปด้านทิศเหนือ

9. บ้านไทยอนุรักษ์ไทยภาคใต้ พื้นที่ใช้งาน 141 ตารางเมตร



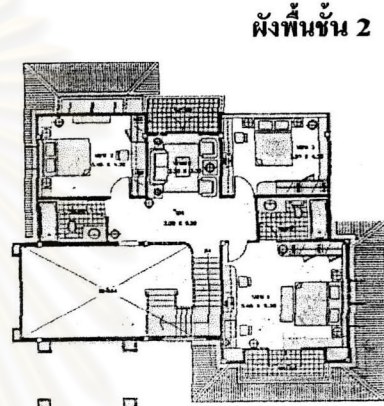
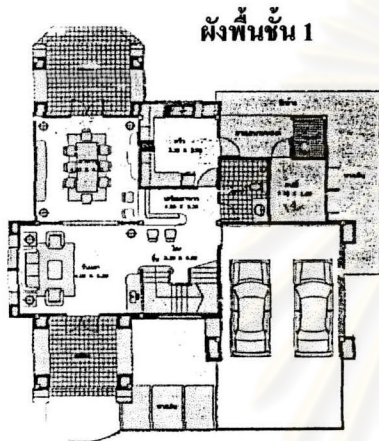
10. บ้านไทยอนุรักษ์ไทยภาคอีสาน พื้นที่ใช้งาน 101.50 ตารางเมตร



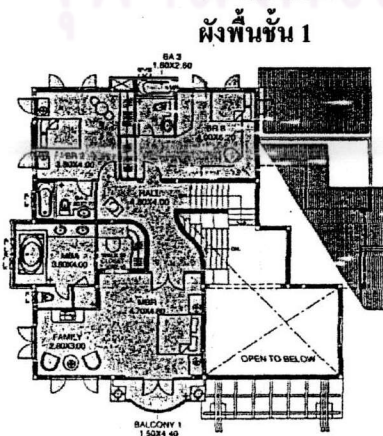
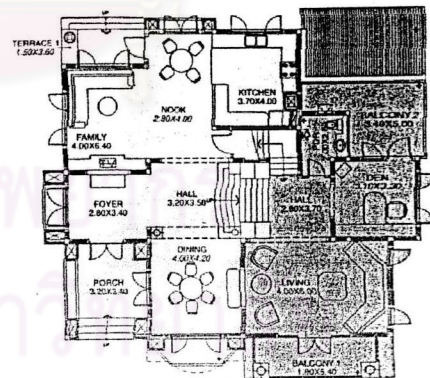
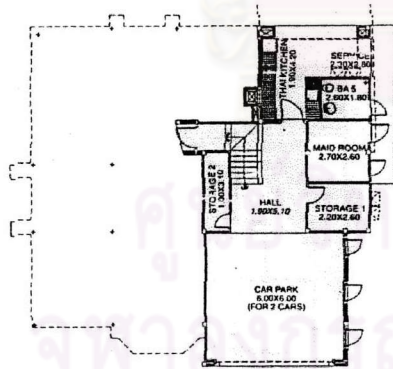
11. บ้านลดาวาริ พื้นที่ใช้งาน 193 ตารางเมตร



ทัศนียภาพ



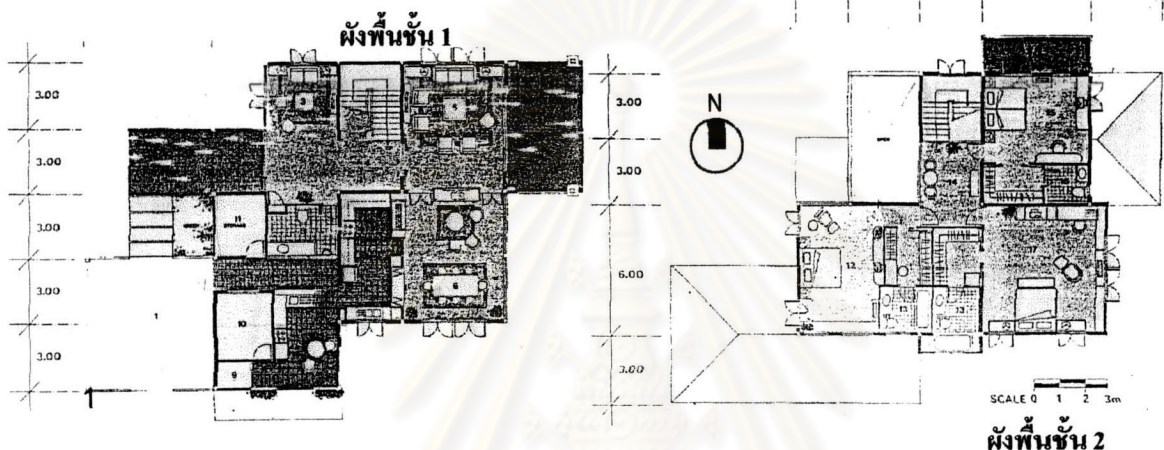
12. บ้านวรรณวนา พื้นที่ใช้งาน 261.50 ตารางเมตร



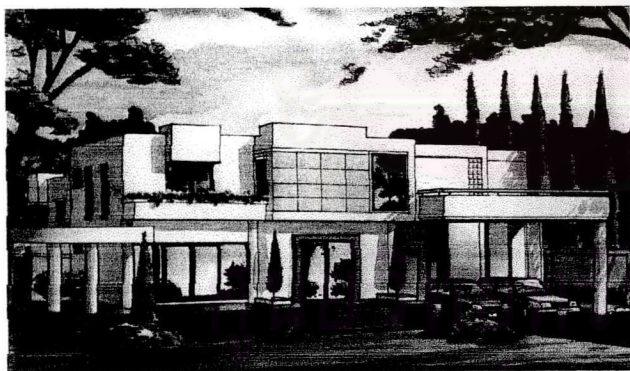
13. บ้านปาล์มเมอร์ พื้นที่ใช้งาน 249.50 ตารางเมตร



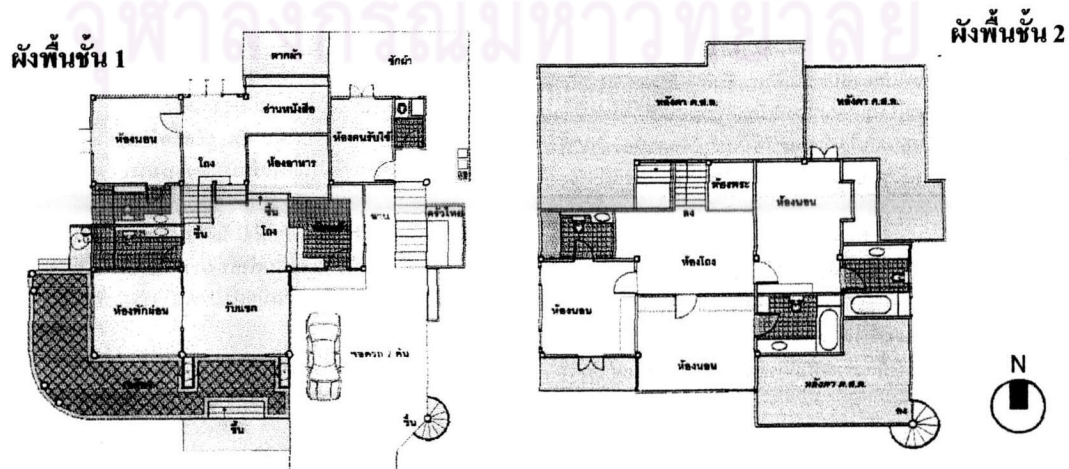
ทัศนียภาพ



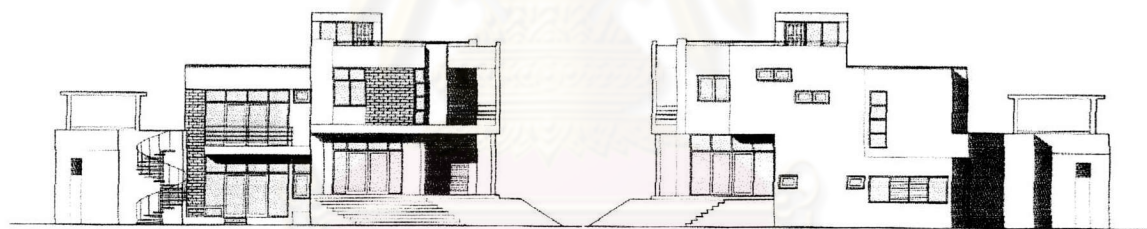
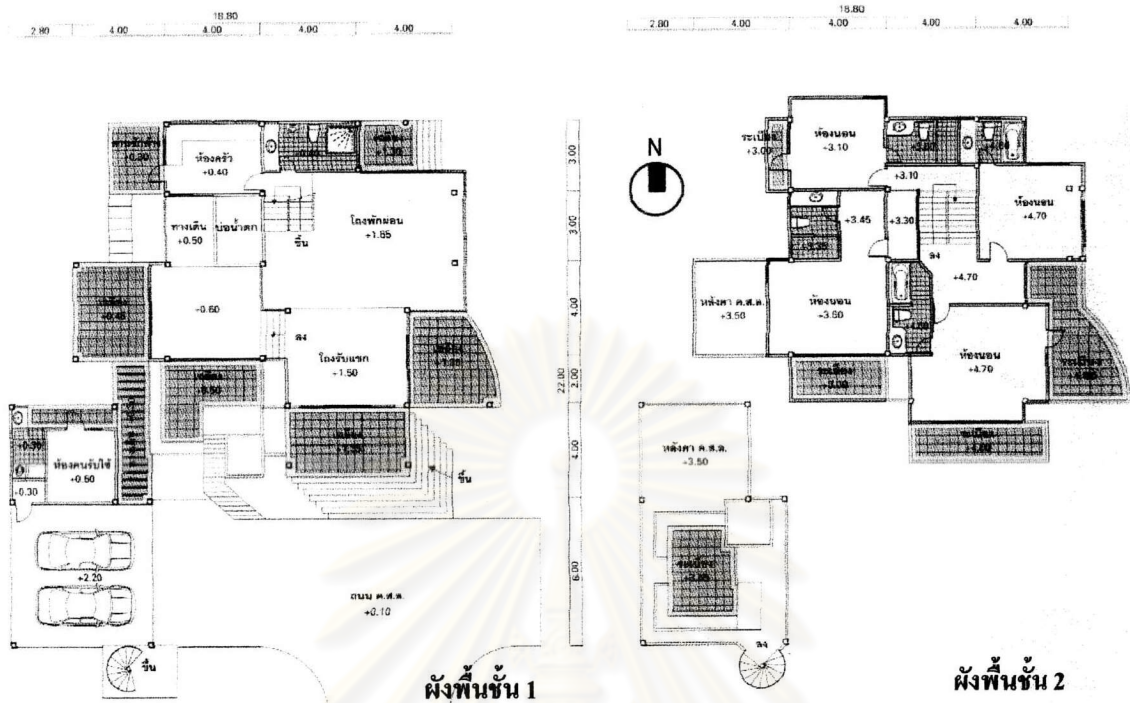
14. บ้านโมเดิร์น พื้นที่ใช้งาน 255.25 ตารางเมตร



ทัศนียภาพ



15. บ้านทราสפור์ม พื้นที่ใช้งาน 250 ตารางเมตร



ประวัติผู้เขียนวิทยานิพนธ์

ชื่อ - นามสกุล	นายปิยชาติ แก้วแดง	
ปีเกิด	16 พฤษภาคม 2521	
2545 - ปัจจุบัน	นิสิตปริญญาโท จุฬาลงกรณ์มหาวิทยาลัย	คณะสถาปัตยกรรมศาสตร์
2545 - 2540	นิสิตปริญญาตรี มหาวิทยาลัยมหาสารคาม	คณะสถาปัตยกรรมศาสตร์

ศูนย์วิทยทรัพยากร
จุฬาลงกรณ์มหาวิทยาลัย