

11	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
+																			
10	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	14	35
+																			
9	+	+	11	+	+	+	+	+	+	+	+	+	+	+	+	26	+	+	+
+																			
8	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	30	29	23	+
+																			
7	+	+	+	+	+	+	+	+	+	+	+	+	+	+	32	27	28	33	+
+																			
6	+	+	+	41	37	+	+	80	83	81	+	+	+	+	34	31	+	+	+
+																			
5	+	+	+	5	36	38	56	79	82	74	73	+	+	+	+	+	+	+	+
+																			
4	+	+	9	40	67	+	55	54	42	46	71	72	+	+	12	+	2	+	+
+																			
3	+	+	7	6	+	39	61	53	44	43	48	50	57	75	+	+	+	+	+
+																			
2	+	68	8	+	10	59	69	60	45	47	49	51	52	58	76	+	+	+	+
+																			
1	+	+	+	+	+	62	63	65	+	70	66	64	77	78	+	+	+	+	+
+																			
	a	b	c	d	e	f	g	h	i	k	l	m	n	o	p	q	r	s	t

Black

White

- 1. r16
- 3. p16
- 5. d5
- 7. c3
- 9. c4
- 11. c9
- 13. c15
- 15. g17
- 17. d13
- 19. d15

- 21. r12
- 23. r8
- 25. r13
- 27. p7

- 2. r4
- 4. d17
- 6. d3
- 8. c2
- 10. e2
- 12. p4
- 14. r10
- 16. e16
- 18. c16
- 20. b16

- 22. l17
- 24. q12
- 26. p9
- 28. q7

12	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	24	21	+
+																				
11	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
+																				
10	+	+	+	+	105	+	+	+	+	+	+	+	+	+	+	+	+	+	14	35
+																				
9	+	+	11	107	104	99	97	+	+	+	+	+	+	+	+	+	26	+	+	+
+																				
8	+	+	112	100	101	96	95	92	+	+	+	+	+	+	+	+	30	29	23	+
+																				
7	+	+	+	103	102	98	90	89	93	+	+	+	+	+	+	32	27	28	33	+
+																				
6	+	+	+	41	37	91	94	80	83	81	85	+	+	+	+	34	31	+	+	+
+																				
5	+	+	+	5	36	38	56	84	82	74	73	+	+	+	+	+	+	+	+	+
+																				
4	+	+	9	40	67	108	55	54	42	46	71	72	88	+	12	+	2	+	+	+
+																				
3	+	111	7	6	106	39	61	53	44	43	48	50	57	75	+	+	+	+	+	+
+																				
2	+	68	8	110	10	59	69	60	45	47	49	51	52	58	76	+	+	+	+	+
+																				
1	+	+	+	+	109	62	63	65	87	70	66	64	86	78	+	+	+	+	+	+
+																				
	a	b	c	d	e	f	g	h	i	k	l	m	n	o	p	q	r	s	t	

Black

White

		84.	h5
85.	l6	86.	n1
87.	i1	88.	n4
89.	h7	90.	g7
91.	f6	92.	h8
93.	i7	94.	g6
95.	g8	96.	f8
97.	g9	98.	f7
99.	f9	100.	d8
101.	e8	102.	e7
103.	d7	104.	e9 *1

10 + 127 + + 105 128 131 141 142 + 147 + 167 + + 184 14 35
 +
 9 133 126 11 107 122 99 97 130 144 137 155 154 + + 26 + +
 185 +
 8 + 121 112 100 124 96 95 92 + + + + 180 + 30 29 23 +
 +
 7 139 132 123 103 102 98 90 89 93 + 157 156 + 32 27 28 33 +
 +
 6 217 134 125 41 37 91 94 80 83 81 85 + + + 34 31 +
 216 +
 5 + 135 120 5 36 38 56 84 82 74 73 + + + + + + +
 +
 4 + 136 9 40 67 108 55 54 42 46 71 72 88 + 12 + 2 +
 +
 3 138 111 7 6 106 39 61 53 44 43 48 50 57 75 + + + +
 +
 2 164 68 8 110 10 59 69 60 45 47 49 51 52 58 76 + + +
 +
 1 163 + 162 214 213 212 63 65 87 70 66 64 86 78 + + + +
 +
 a b c d e f g h i k l m n o p q r s
 t

Black

White

	124. e8
125. c6 *1	126. b9
127. b10	128. f10
129. e11	130. h9
131. g10	132. b7
133. a9 *1	134. b6
135. c5	136. a4
137. k9	138. a3
139. a7	140. g11
141. h10	142. i10
143. h11	144. i9
145. h12	146. i12
147. l10	148. h13
149. g12	150. i11
151. l12	152. l13
153. m12	154. m9
155. l9	156. m7


```

14 + + + + + + 192 193 + + + + 166 171 + + 187 +
+
13 + + + 17 + + 158 148 200 160 152 172 169 170 215 168 25 +
+
12 + + + + + 159 149 145 146 + 151 153 173 181 + 24 21 +
+
11 + + + + 129 + 140 143 150 + + + + + 186 183
182 +
10 + 127 + + 105 128 131 141 142 + 147 + 167 + + 184 14 35
+
9 133 126 11 107 122 99 97 130 144 137 155 154 + + 26 + +
185 +
8 + 121 112 100 124 96 95 92 + 223 222 + 180 + 30 29 23 +
+
7 139 132 123 103 102 98 90 89 93 + 157 156 + 32 27 28 33 +
+
6 217 134 125 41 37 91 94 80 83 81 85 + + + 34 31 +
216 +
5 + 135 120 5 36 38 56 84 82 74 73 + + + + + + +
+
4 + 136 9 40 67 108 55 54 42 46 71 72 88 + 12 + 2 +
+
3 138 111 7 6 106 39 61 53 44 43 48 50 57 75 + + + +
+
2 164 68 8 110 10 59 69 60 45 47 49 51 52 58 76 + + +
+
1 163 + 162 214 221 218 63 65 87 70 66 64 86 78 + + + +
+
a b c d e f g h i k l m n o p q r s
t

```

Black

White

219. b15

218. f1 *1
220. e15

221. e1 *1
223. k8

222. l8


```

2 164 68 8 110 10 59 69 234 45 47 49 51 52 58 76 + + +
+
1 163 + 162 214 229 232 63 65 87 70 66 64 86 78 + + + +
+
a b c d e f g h i k l m n o p q r s
t

```

Black

White

```

224. f1 *1
225. f14
226. f13
227. e14
228. b18
229. e1 *1
230. e13
231. d14
232. f1 *1
233. n16
234. h2
235. n17
236. e12
237. f11 *2
238. d12
239. c12
240. h16

241. h17 *1
242. k16
243. m15
244. m14
245. m16
246. l15
247. s7
248. s5
249. n9
250. p6
251. n6
252. o10
253. n10
254. o8
resigns

```

The Game of GO

Board

The GO board (figure 0) has 19 vertical and 19 horizontal lines, with nine specially marked points. You can also play GO on a 13 by 13 board for faster and easier games.

```

a b c d e f g h i k l m n o p q r s
t
19 + + + + + + + + + + + + + + + + +
+
18 + + + + + + + + + + + + + + + +
+
17 + + + + + + + + + + + + + + + +
+
16 + + + * + + + + + * + + + + * + +
+

```

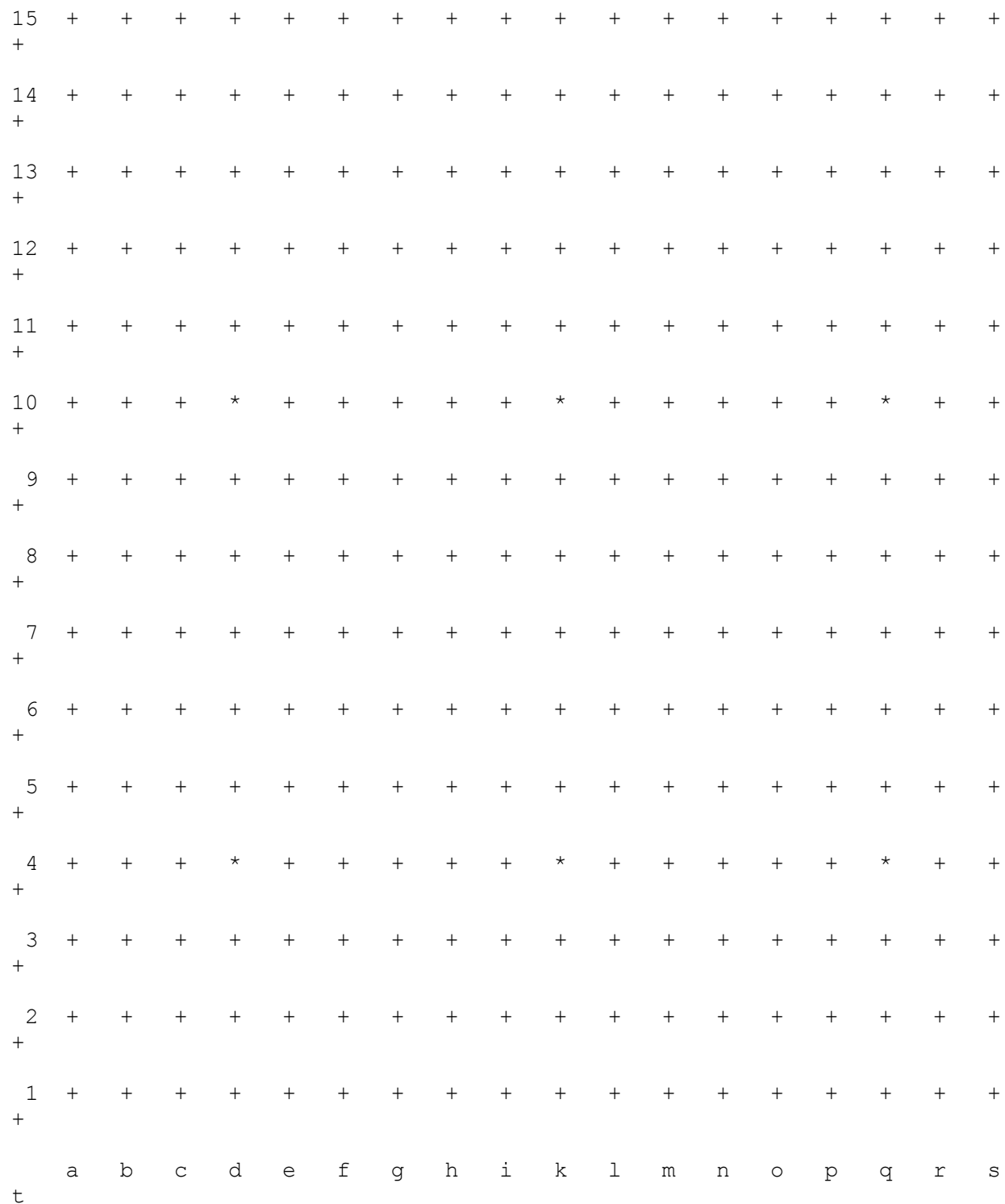


Figure 0

****Stones****

GO uses pebble-like stones, called stones, colored black or white. The weaker player gets the black stones.

****Turns****

You play by placing one stone from your box on a point where two lines cross; you do not move stones from point to point on the board. You may also pass your turn. There is no time limit for making a move.

****Object of the Game****

You try to surround as many points as possible with your stones, and prevent the other player from surrounding territory. This requires you to capture opposing stones and protect your stones.

****Using this Book****

Figure 0 shows the notation system used on a GO board so that you will be able to play games you read in other GO books. This book shows the plays on the GO board itself, so you do not have to learn this notation. It also shows the list of moves.

You should play each move of the games described in this book on a real GO board as you read each section. This will give you the feel of a real game and help you remember the actual patterns of play that appear in GO.

After you have played through the games in this book, you will be ready to play a good game against any other GO player.

*****Opening Play*****

****First Move****

Black plays first.

If both players agree on a handicap, Black's first turn is the placement of 2 to 9 stones on the marked points on the board (figure 0), in a symmetrical pattern. Place 2 stones in the upper right and lower left corners, leaving White's right hand corner empty. Place 3 stones in the upper right, lower left, and lower right corners, leaving White's right hand corner empty. Place 4 stones in the 4 corners. Place 5 stones in the 4 corners and in the center. Place 6 stones in the 4 corners and on the right and left sides. Place 7 stones in the 4 corners, on the right and left sides, and in the center. Place 8 stones in the 4 corners and the 4 sides. Place 9 stones on all the points.

If there is no handicap, Black (odd numbers on the board) plays first near one of the marked points in his or her right hand corner, usually at 1 or r, as in figure 1. Plays at s are somewhat weaker than at 1 or r, but may be used in other corners later, depending on the configurations of stones already on the board. Do not play at any other point in the corner, because it is either too far or too close to the corner.

You try to surround the corner territory first because it is easiest and quickest. The corner is also the best place from which to surround territory on the sides and in the center. In general, you can only

control a side by extending from a corner, and the center by extending from a side.

t	a	b	c	d	e	f	g	h	i	k	l	m	n	o	p	q	r	s
19	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
18	+	w	w	w	w	w	+	+	+	+	+	+	+	+	+	+	+	+
17	+	w	s	r	2	y	+	+	+	+	+	+	+	+	+	+	+	+
16	+	w	1	s	x	z	+	+	+	*	+	+	+	+	+	*	+	+
15	+	w	+	+	u	u	+	+	+	+	+	+	+	+	+	+	+	+
14	+	w	v	v	u	+	+	+	+	+	+	+	+	+	+	+	+	+
13	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
12	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
11	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
10	+	+	+	*	+	+	+	+	+	*	+	+	+	+	+	*	+	+
9	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
8	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
7	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
6	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
5	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
4	+	+	+	*	+	+	+	+	+	*	+	+	+	+	+	*	+	+

```

  3 + + + + + + + + + + + + + + + + + +
+
  2 + + + + + + + + + + + + + + + + + +
+
  1 + + + + + + + + + + + + + + + + + +
+
    a  b  c  d  e  f  g  h  i  k  l  m  n  o  p  q  r  s
t

```

```

Black          White
1. c16         2. e17

```

Figure 1

****Second Move****

White (even numbers on the board) responds to Black's first move by playing 2 or 3 points away from Black's stone (figure 1), at 2 or x, or y or z. White can also make the first move in another corner of the board, to start building a position there. Both types of play are equally good. Play in the same corner signals an aggressive, tactical game. Play in another corner signals a subtle, strategic game.

Do not choose any other second move. A play at w makes it easy for the stone to be captured against the side. A play at u is too far from the side to control territory in the corner or along the side. A play at v is wasted at this time, since Black has effectively blocked off that side of the corner. Any play adjacent to Black invites attack and fails to stake out territory.

On all moves, make attacking plays that help surround territory, if possible. Before making a defensive play, first make an attacking move.

```

    a  b  c  d  e  f  g  h  i  k  l  m  n  o  p  q  r  s
t
19 + + + + + + + + + + + + + + + + + +
+
18 + + + + + + + + + + + + + w w w w w
+
17 + + + + 2 + 10 + + + + + v t + 7 + w
+
16 + + 1 * + + + + + * + + v u u * + w
+
15 + + + + + + + + + + + + + + u r 9 w
+

```

14	+	+	8	+	+	+	+	+	+	+	+	+	+	+	+	+	r	r	w
+																			
13	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	v	v	+
+																			
12	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
+																			
11	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
+																			
10	+	+	+	*	+	+	+	+	+	*	+	+	+	+	+	+	*	+	+
+																			
9	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
+																			
8	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
+																			
7	+	+	v	v	+	+	+	+	+	+	+	+	+	+	+	+	v	v	+
+																			
6	+	w	r	r	u	+	+	+	+	+	+	+	+	+	+	u	r	6	w
+																			
5	+	w	r	r	u	u	+	+	+	+	+	+	+	+	u	u	+	+	w
+																			
4	+	w	+	*	4	r	v	+	+	*	+	+	v	r	+	5	+	w	
+																			
3	+	w	3	+	r	r	v	+	+	+	+	+	v	r	+	+	+	+	w
+																			
2	+	w	w	w	w	w	+	+	+	+	+	+	+	w	w	w	w	w	
+																			
1	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
+																			
	a	b	c	d	e	f	g	h	i	k	l	m	n	o	p	q	r	s	
t																			

Black

White

- 1. c16
- 3. c3
- 5. q4
- 7. q17
- 9. r15

- 2. e17
- 4. e4
- 6. r6
- 8. c14
- 10. g17

Figure 2

Other Early Moves

The lower right corner of figure 2 shows the best plays for White (at O or r) when Black plays on the 4-4 point (the marked point). Do not play at w, v, or u, for the reasons given before.

The lower left corner of the board shows the best plays for White (at O and r) when Black plays on the 3-3 point. Do not play at w, v, or u, for the reasons given before.

These two-stone positions are also the best if both stones are the same color, as in the upper right corner, because these are the positions where each stone has the most influence.

The 3-3 Point

The 3-3 point (where the third lines cross) is the most important for control of the corner territory, since it guards both sides, protects adjacent stones, and potentially controls 10 points.

In the upper left corner (figure 2), White cannot go to the 3-3 point immediately since Black can attack White and trap White stones against the side. Black should not go there immediately since this leaves the Black stones too close together, making less territory and inviting attack on a small group. To control this point, place a stone near the 3-3 point after first playing a protecting stone, staking out territory, and attacking the other player's protecting stone(s).

In the lower right corner (where Black is on the 4-4 point), White must attack the Black stone, and Black must protect it, in order to control the 3-3 point.

In the lower left corner (where Black is on the 3-3 point), Black must make this stone safe from capture, while White tries to surround it.

In the upper right corner (where White has not yet played), White must prepare to attack the stones surrounding the 3-3 point by moving in from one side.

Early Strategy

In the upper left corner (figure 2), White is blocking Black from extending out the side and is surrounding Black from the outside, while trying to capture Black's stones surrounding the 3-3 point. White is in better position for the sides and center. Black is blocking White from penetrating into the corner and is preparing to surround the corner territory and the 3-3 point. Black is in better position in the corner. The position is equal for both players.

In the upper right corner, White will play at t to block Black from extending to the side and then attack the stones surrounding the 3-3

15	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
14	+	+	10	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
13	+	+	+	+	+	+	+	+	+	+	+	+	+	+	22	+	+	
12	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
11	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
10	+	+	+	*	+	+	+	+	+	*	+	+	+	+	+	*	+	+
9	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
8	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
7	+	+	12	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
6	+	+	+	+	19	+	+	+	+	+	+	+	+	+	+	+	9	r
5	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
4	+	+	4	*	5	+	+	11	+	*	+	+	+	s	+	20	7	+
3	+	+	+	+	+	+	+	r	+	+	+	+	+	8	+	+	+	+
2	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
1	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
t	a	b	c	d	e	f	g	h	i	k	l	m	n	o	p	q	r	s

Black

White

- 1. c16
- 3. r17
- 5. e4
- 7. r4

- 2. e17
- 4. c4
- 6. p16
- 8. o3

9. r6	10. c14
11. h4	12. c7
13. p18	14. r16
15. p17	16. q16
17. q17	18. h17
19. e6	20. q4
21. d17	22. q13

Figure 3

****Extensions****

Extensions from the corner stones toward the side and center stake out territory. Extend along the 3rd or 4th line to a point two points away from the side's marked point, if no other stones are near, as illustrated by Black at M or r in the lower left corner (figure 3).

Extending a distance of three points from your own stone along the 3rd or 4th line along the side is best, as shown by White at O or s in the top left corner, and by Black and White in the lower left corner. Extending four or more points is not advisable since an opposing stone can go between your stones without fear of attack.

If you must protect a stone extend only two points, since any opposing stone cannot break into your line without being attacked. Black (at M or r) and White (at O or s) have extended two points in the lower right corner since their stones are under attack.

Extending a distance of two points is also best when extending toward the center since defense is more important in that direction. Black has extended two points toward the center in the lower left corner.

Farther extensions may be made from strong groups of stones. If two or more stones are in a line, extensions should be made out from the face of the line of stones, not from the ends. This surrounds territory better. White has made such an extension in the upper right corner.

Each of the patterns of extensions is also good if the extended stone is of the opposite color, since this prevents good extensions by the opponent and places stones where they have the most influence.

****Walls and Corners****

Once territory is staked out, make walls and corners to make safer groups of stones. A wall of White and a corner and wall of Black are illustrated in the upper right corner (figure 3). Walls and corners prevent penetration of territory and make larger groups of stones that are harder to surround.

You should force the other player toward your walls and corners, and stay away from his or her walls and corners, since they block extensions and escapes.


```

      ^   ^   ^
5 56 49 41  y  +  +  +  +  +  +  +  +  +  +  +  +  z 40 39 42
z
      ^
4 54 48  4 45  5  +  + 11  +  *  +  +  +  +  +  + 20  7 38
+
      ^   ^   ^
3 65 53 47  y  +  +  +  +  +  +  +  +  +  +  8  +  + 36  +
+
2  +  +  +  +  +  +  +  +  +  +  +  +  +  +  +  +  +  +  +
+
1  +  +  +  +  +  +  +  +  +  +  +  +  +  +  +  +  +  +  +
+
      a  b  c  d  e  f  g  h  i  k  l  m  n  o  p  q  r  s
t

```

Black

White

23. b16
25. c18
27. b18
29. a17 *2
31. s16
33. r15
35. o16
37. p15
39. r5

41. c5
43. q6
45. d4
47. c3
49. b5
51. s6
53. b3
55. i8
57. a6
59. pass

24. c17
26. b17
28. d16
30. s17
32. o17
34. o18
36. r3
38. s4
40. q5

42. s5
44. p6
46. q7
48. b4
50. r7
52. s7
54. a4
56. a5
58. i7
60. i9

61. pass
63. pass
65. a3 *4

62. h8
64. k8 *1
66. t6 *5

Figure 4

****Capturing a Group of Stones****

To capture a group of the other player's stones, you must completely surround them. White stones surround a Black stone in the center of the board (figure 4), Black stones surround a group of two White stones in

the upper left corner, and White stones surround a group of five Black stones in the lower right corner.

Black stones and the edge of the board surround a group of four White stones in the lower left corner. The edge of the board acts like a row of your stones when it is your turn, so this group of White stones is surrounded.

The edge of the board acts like a row of opposing stones when it is your opponent's turn. For this reason, you should always treat a stone beside the edge of the board as if there is a stone of opposite color next to it.

Only stones above, below, right, and left of a group of stones can surround it. Placing a stone at x does not help surround the two White stones in the upper left corner. Placing a stone at y does not help surround the four White stones in the lower left corner. Placing a stone at z does not help surround the five Black stones in the lower right corner.

When you completely surround a group of stones during your turn, you must remove all the stones in the group from the board and place them in a pile beside you. You do not remove stones diagonal to the group. For example, the White stone on the 4-4 point in the upper left corner is not in the group of two stones and will remain on the board when Black removes the two White stones.

You never remove any of your own stones from the board.

****Atari****

When your play leaves only one open point remaining around a group (as for both Black and White in the upper right corner of figure 4), you must say "atari" to point out the situation. GO is a game won by superior skill in tactics and strategy, not through trickery, error, or oversight.

****The Edge of the Board****

Because the edge of the board helps your opponent surround a group, your groups should not grow toward a side except to capture stones or finish surrounding a territory.

If your stones appear trapped against a side, do not waste moves defending them, since you will only lose more stones. If you trap a group against the side, do not capture the stones immediately. Only capture them when the territory is threatened. If the territory is safe, they will be awarded to you at the end of the game.

****Attacking****

To attack a group, play first on the point that takes away the most opportunities for the group's expansion, to keep that group small and bunched. If there are two such points, play first on the side nearer the center; plays nearer the side should be made only to complete an attack


```

  7 + + 12 + + + + + 58 + + + + + 83 46 50 52
+
  6 57 87 + + 19 + + + + + + + + + 44 43 9 51
+
  5 56 49 41 + + 90 + 74 70 78 66 60 + + + 40 39 42
+
  4 54 48 4 45 5 + 76 11 75 y 65 59 62 + + 20 7 38
+
  3 + 53 47 + + + 77 + + + + 64 + 8 + + 36 +
+
  2 + + + + + + + + + + + + + + + + + +
+
  1 + + + + + + + + + + + + + + + + 80 +
+
    a b c d e f g h i k l m n o p q r s
t

```

Black

White

```

59. m4          60. m5
61. h16         62. n4
63. g17         64. m3
65. l4          66. l5
67. h18         68. i17
69. i16         70. i5
71. i18         72. k17
73. l17         74. h5
75. i4          76. g4
77. g3          78. k5
79. p8          80. r1
81. q8          82. i9
83. p7          84. h8
85. r8          86. k8 *1
87. b6          88. e8
89. s18         90. f5
91. s8

```

Figure 5

****Defending****

To defend a group, play first on the point that gives the most opportunities for the group's expansion, to help the group become large and long. If there are two such points, play first on the side nearer the center; plays nearer the side should be made only to secure territory. White should play on z in the upper center (figure 5) to expand toward the center.

If you cannot expand, play first on the point that helps make a wall or corner. Black should play on y in the lower center to make a wall.

If you cannot expand and cannot make a wall or corner, play on a point that is diagonal to your territory to defend against entry. Black's play at v in the upper right corner defends against White's entry.

If you cannot expand, cannot make a wall or corner, and cannot prevent threats to enter your territory, play on a point that surrounds territory or prevents the adversary from surrounding territory.

****Attacking or Defending****

When you are defending or attacking, you must count the open points around the attacking and defending groups to make sure your stones will not be captured before you complete your attack or defense.

Make long and large groups, because then many more stones must be used to surround you. Also, large and long groups help surround territory.

Each group should have a path along which to grow toward the center (best) or along the side. Do not enlarge groups toward the edge except to seal off territory.

It is better not to attack or defend groups of one or two stones, unless it helps in preventing or helping expansion, preventing or making walls and corners, or penetrating or surrounding territory. It is more important to make territory than to capture.

****Completing Capture****

In disputed territory, play to complete the capture a group of stones, before further play deprives you of the opportunity. Capturing is better than merely securing territory since you get points for both the stones captured and the territory you now control. White has captured the five-stone Black group in the lower right corner (figure 6) and will gain five points for the territory and five for the captured stones.

****Postponing Capture****

You should postpone capture only if capture is certain at all times in the future. This occurs only when the other player cannot enter the territory diagonally or directly without losing stones.

Stones certain to be captured are automatically credited to you at the end of the game. You should not use your stones to capture these stones, since you will fill up your territory and reduce the number of empty points you surround. Black has a secure area in the lower left corner (figure 6), so no actual capture is necessary there.

****Sacrificing****


```

10 + + + * + + + + + * + + + + + * + +
+
 9 + + 94 + + + + + 82 + + + + + + + + +
+
 8 + + + + 88 + + 84 55 86 + + + + 79 81 85 91
+
 7 + + 12 + + + + + 58 + + + + + 83 46 50 52
117
 6 57 87 + + 19 + + + + + + + + 105 44 43 9x 51
92
 5 56 49 41 93 + 90 + 74 70 78 66 60 + 118 107 40 39y 42
112
 4 54 48 4 45 5 + 76 11 75 y 65 59 62 + 109 20 7 38
119
 3 + 53 47 + 95 96 77 + + + + 64 + 8 + 111 36
115 +
 2 100 102 + 101 97 98 + + + + + + + + 114 113 +
+
 1 + + 103 + 99 + + + + + + + + + 116 80 +
+
  a b c d e f g h i k l m n o p q r s
t

```

Black

White

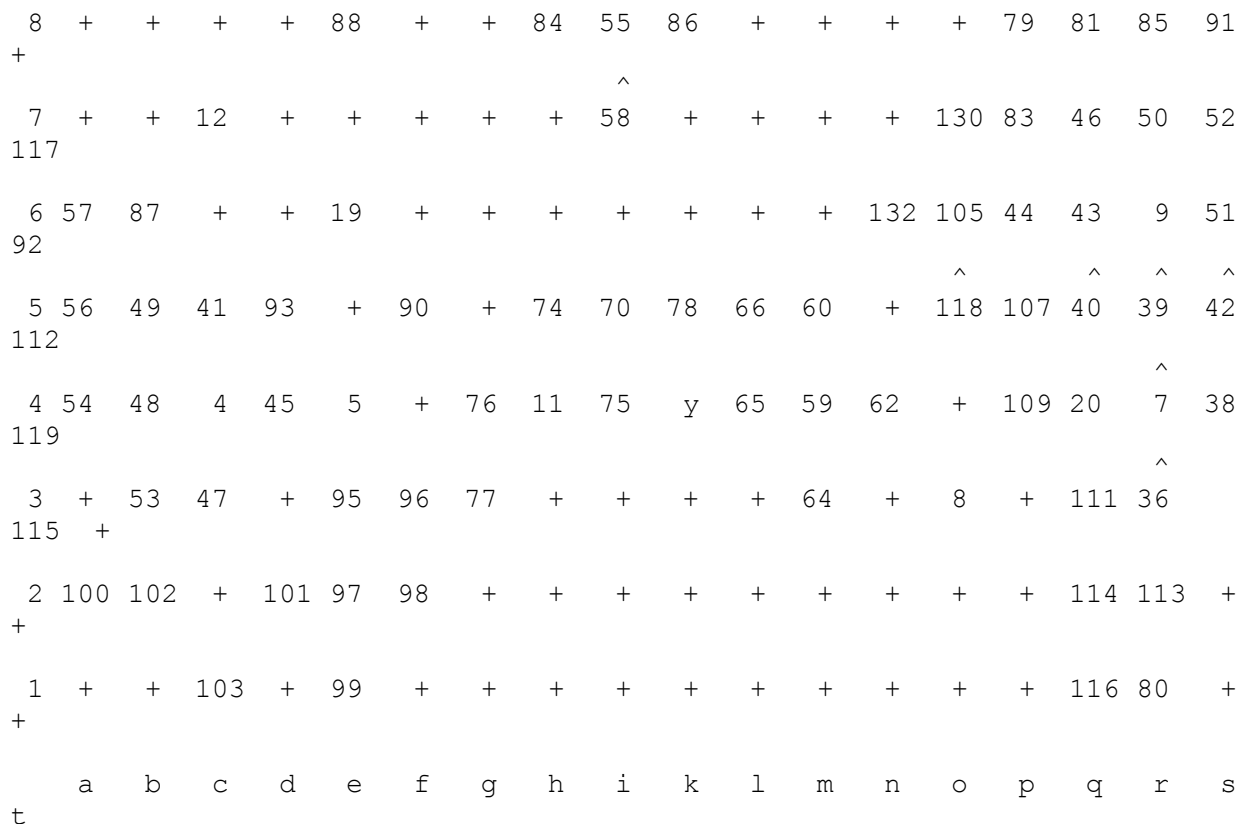
```

92. t6 *5
93. d5
94. c9
95. e3
96. f3
97. e2
98. f2
99. e1
100. a2
101. d2
102. b2
103. c1
104. c15
105. o6
106. d15
107. p5
108. b15
109. p4
110. a15
111. q3
112. t5
113. r2
114. q2
115. s3
116. q1
117. t7
118. o5
119. t4

```

Figure 6

Territory



Black

White

- | | |
|----------|----------|
| 121. c19 | 120. d18 |
| 123. f17 | 122. f18 |
| 125. g18 | 124. d19 |
| 127. g19 | 126. f19 |
| 129. e16 | 128. e19 |
| 131. p19 | 130. o7 |
| 133. t19 | 132. n6 |

Figure 7

****Eyes****

An eye is an unoccupied point with four stones of one color (or the sides of the board) around it. The territory in the lower left corner (figure 7) has two eyes in it.

When the outside of the territory is surrounded and there is only one eye in a territory, a play into that eye captures the group. White territory with one eye is shown in the upper left corner. Since Black surrounds the White stones on the outside, Black can capture all six White stones in one more move by occupying the inside.

****Two Eyes****

18 + 27 25 120 + 122 125 67 71 135 137 138 + 34 13 + + 89
 t
 17 29 26 24 21 2 123 63 18 68 72 73 136 + 32 15s 17 3
 30r +
 16 + 23 1 28 129 + + 61 69 140 134 + + 35 6 16 14 31
 +
 15 110 108 104 106 + + 187 + + + + + + 37 + 33 +
 +
 14 + + 10 + + + + + + 162 + + + + + + +
 +
 13 + + + + + + + 189 + 168 161 190 + + + 22 185 +
 +
 12 + + + + + + + 184 169 + 173 172 + + + + +
 +
 11 + + + + + + + 182 159 + x + 171 170 + + 175 +
 +
 10 + + + * + + + 180 163 + + 167 155 188 + 179 +
 181 +
 9 178 174 94 158 + + + + 82 165 157 166 186 + 177 + +
 183 +
 8 + + + + 88 + + 84 55 86 164 + + + 79 81 85 91
 +
 7 176 160 12 156 + + + + 58 + + + + 130 83 46 50 52
 117
 6 57 87 + + 19 + + + + + + 132 105 44 43 9z 51
 92
 5 56 49 41 93 + 90 + 74 70 78 66 60 + 118 107 40 39 42
 112
 4 54 48 4 45 5 + 76 11 75 141 65 59 62 + 109 20 7 38
 119
 3 + 53 47 + 95 96 77 149 + + 143 64 + 8 + 111 36
 115 r
 2 100 102 + 101 97 98 148 147 151 145 144 + + + 142 114 113
 153 +
 1 + + 103 + 99 + + + + 150 + 154 152 146 + 116 80 +
 +

t a b c d e f g h i k l m n o p q r s

Black

White

		134. l16
135. k18		136. m17
137. l18		138. m18
139. l19		140. k16
141. k4		142. p2
143. l3		144. l2
145. k2		146. o1
147. h2		148. g2
149. h3		150. k1
151. i2		152. n1
153. s2		154. m1
155. n10		156. d7
157. l9		158. d9
159. i11		160. b7
161. l13		162. l14
163. i10		164. l8
165. k9		166. m9
167. m10		168. k13
169. k12		170. o11
171. n11		172. n12
173. m12		174. b9
175. r11		176. a7
177. p9		178. a9
179. q10		180. h10
181. s10		182. h11
183. s9		184. i12
185. r13		186. n9
187. g15		188. o10
189. h14		190. m13

Figure 8

****Territories with Four Empty Points****

If a territory has four empty points in a row (as on the left side of figure 8), it is safe. After the opponent plays into it, two eyes can still be made.

If a territory has four empty points in an L shape, it is a safe territory (for the same reason), unless it is in the corner. In this case (shown in the lower right corner), the next play by Black or White should be in the middle of the three points in a row to ensure or block two eyes.

If the territory has four empty points in a T shape (as for White on the lower side), the next play by Black or White should be in the middle point to make or prevent two eyes.

If the territory has four empty points in a square shape, there is no defense and the territory is lost if its surrounding stones are themselves surrounded.

****Territories with Five Empty Points****

If a territory has five empty points, it is a safe territory, except in two patterns:

One is when the five points make a T or a cross; the next play is in the crossover point to make or prevent two eyes. Black or White should play at z of White's T territory in the lower right corner (figure 8).

The other is when the five points make a square plus one extra point; the next play is in the corner of the square adjacent to the extra point to make or prevent two eyes. White or Black should play at y in the upper right corner.

****Territories with Six Empty Points****

If a territory has six empty points, it is a safe territory, except when the points make the shape of a house (shown in the center of figure 8 - the star is the roof and the five other points make a square with a center). Black or White should play at x, the central point, to make or prevent two eyes.

****Neutral Territory****

A group of empty points that is surrounded by stones of different colors is not a territory. Such points can only be made into a territory by capturing the other color stones. Neutral territory is shown on the lower left side (figure 9). No moves should be made into neutral territory unless it has more than ten empty points or captures are possible.

****Your Territory****

Do not play into your territory, unless it is necessary to protect your eyes or stones. If you must play there, play to make eyes in one or two moves.

****Small Opposing Territory****

Enter opposing territory with six or less empty points only if the shape of the territory is favorable, as discussed in the previous sections. You can only gain points there if you can prevent eye formation.

****Large Opposing Territory****

If the territory is large enough (ten points or more) to give you a chance for formation of two eyes, play two, three, or four points in from


```

      ^
7 176 160 12 156 + + + + 58 + + + + 130 83 46 50 52
117

6 57 87 + + 19 + + + + + + + + 132 105 44 43 206 51
92

5 56 49 41 93 + 90 + 74 70 78 66 60 + 118 107 40 39 42
112

4 54 48 4 45 5 + 76 11 75 141 65 59 62 + 109 20 7 38
119

3 + 53 47 + 95 96 77 149 + + 143 64 + 8 + 111 36
115 191

2 100 102 + 101 97 98 148 147 151 145 144 + + + 142 114 113
153 +

1 + + 103 + 99 + + + + 150 + 154 152 146 + 116 80 +
+

a b c d e f g h i k l m n o p q r s
t

```

Black

White

- | | |
|----------|----------|
| 191. t3 | 192. g12 |
| 193. r19 | 194. g14 |
| 195. t18 | 196. g13 |
| 197. g8 | 198. g9 |
| 199. f8 | 200. f9 |
| 201. h12 | 202. f15 |
| 203. c12 | 204. e15 |
| 205. e10 | 206. r6 |

Figure 9

****Open Space****

Usually you should play only into regions that are not surrounded, since the most territory may be gained there. Play by extending out from your existing stones so that only one to three more stones are needed to surround a territory. The right side illustrates this situation for Black (figure 10).

Surround the territory with stones placed to require only one or two more stones to make eyes, as shown in the lower right corner and right side.

Do not completely surround the territory until necessary under threat from the opponent. It is better to try to gain more territory elsewhere than to secure the territory.

****Connecting Groups and Territories****


```

  4 54  48   4  45   5   +  76  11  75  141 65  59  62   + 109 20   7  38
119
                                     ^
  3  +  53  47   +  95  96  77  149  +   +  143 64   +   8   +  111 36
115 191

  2 100 102  +  101 97  98   148 147 151 145 144  +   +   +  142 114 113
153  +

  1  +   +  103  +  99   +   +   +   +  150  +  154 152 146  +  116 80   +
+
      a   b   c   d   e   f   g   h   i   k   l   m   n   o   p   q   r   s
t

```

Black	White
207. n16	208. f14
209. o15	210. g11
211. m16	212. e9
213. o14	214. i6
215. b17 *1	216. e7
217. q12	218. q11
219. s13	220. p11
221. p10	222. t8
223. g16	

Figure 10

****Securing Territory****

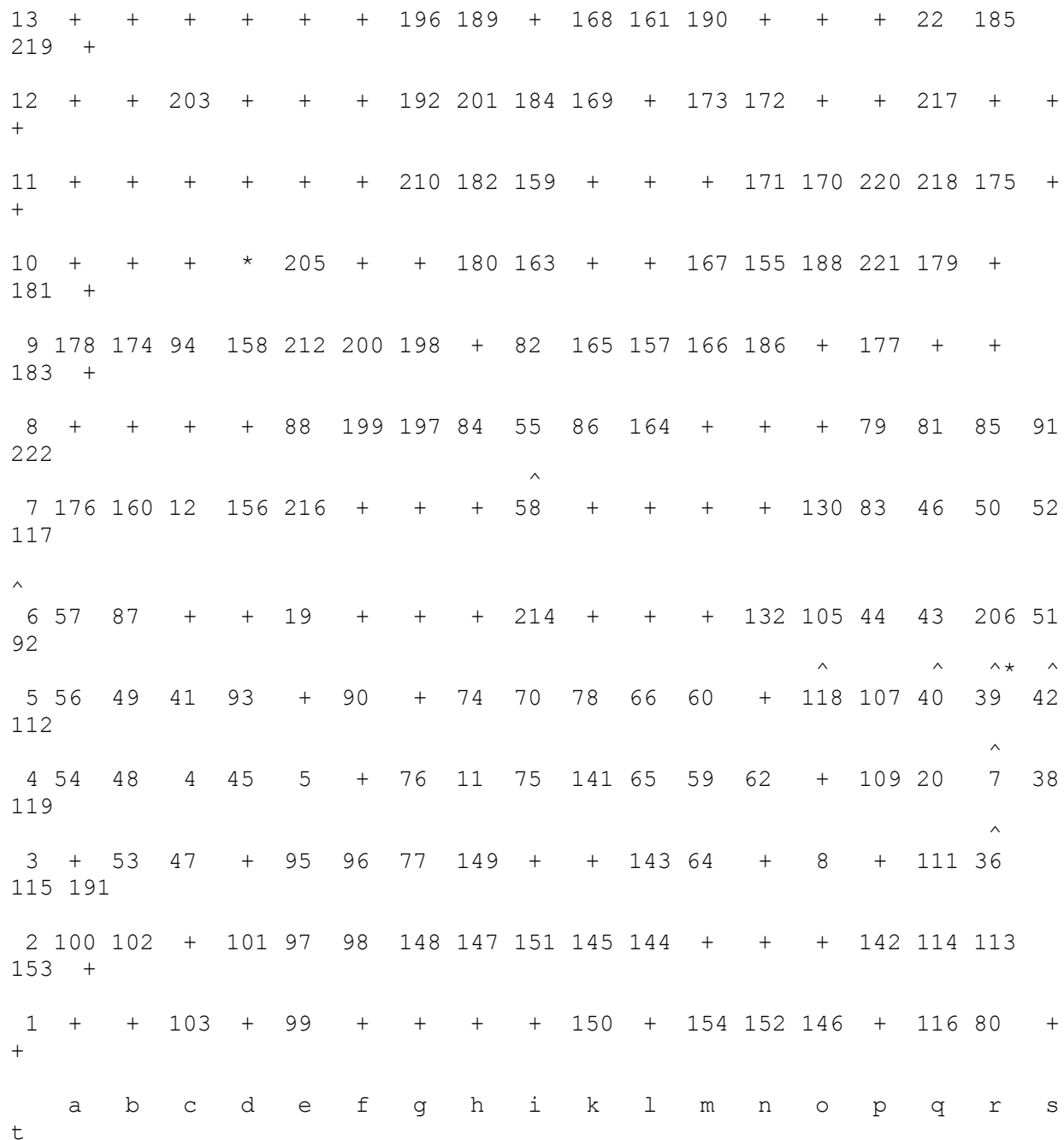
After all territory has been staked out around the board, your territory should be made secure. Territory along a side is not secure if the adversary has a stone on a diagonal next to the territory, as Black does on the left center (figure 10). Black can cut into the territory and perhaps capture some stones. White should try to block or surround those entry points, as shown on the left center.

The best way to surround a territory is with walls and corners of stones, rather than with stones placed diagonally. A wall makes a group of stones longer and more spread out, and so protects it. White at the lower center is very safe and is surrounding territory well. Corners protect territory, by preventing entry. There are many illustrations of the value of corners all over the board.

****Unsafe Territory****

Your territories will be lost if there are two diagonal routes into them. You must play to allow only one opposing stone on a diagonal into your territory.

If there are two opposing stones diagonal to points in your territory, you must attack them. If they cannot be captured, you should leave this territory alone and attack in another part of the board. You hope to



Black

White

224. c17

Figure 11

****Recapturing a Stone Immediately After It Captures a Single Stone****

It is forbidden to immediately recapture a single stone that has just been used to capture one (and only one) of your stones, if this recapture results in the same pattern of stones as before the first capture. Such a

11 + + z 228 v v 210 182 159 + 229 + 171 170 220 218 175 +
 +
 10 + + y 230 205 225 227 180 163 + + 167 155 188 221 179 +
 181 +
 9 178 174 94 158 212 200 198 + 82 165 157 166 186 + 177 + 243
 183 237
 8 + + + + 88 199 197 84 55 86 164 + + 244 79 81 85 91
 222
 7 176 160 12 156 216 + + + 58 + + + + 130 83 46 50 52
 117
 ^
 6 57 87 + + 19 + + + 214 + + + 132 105 44 43 206 51
 92
 5 56 49 41 93 + 90 + 74 70 78 66 60 + 118 107 40 39 42
 112
 4 54 48 4 45 5 + 76 11 75 141 65 59 62 + 109 20 7 38
 119
 3 + 53 47 + 95 96 77 149 + + 143 64 + 8 + 111 36
 115 191
 2 100 102 + 101 97 98 148 147 151 145 144 + 248 + 142 114 113
 153 240
 ^
 1 + + 103 + 99 247 + + 245 150 246 154 152 146 + 116 80
 242 249
 a b c d e f g h i k l m n o p q r s
 t

Black

White

225. f10	226. n15
227. g10	228. d11
229. l11	230. d10
231. i19	232. d12
233. a19	234. b12
235. d17 *1	236. q15
237. t9	238. q14
239. r14	240. t2
241. m14	242. s1
243. r9	244. o8
245. i1	246. l1
247. f1	248. n2
249. t1 *1	250. end of game

Figure 12

****The Ladder****

The "ladder" is shown above the left-most y on the left side (figure 12). White can capture the one-stone Black group in one more move, but White should not do it.

If Black moves to enlarge the group by playing at z, White can play at y and cause atari again. If Black then tries to enlarge the group again, White can always play to capture or make atari, finally driving Black to the edge of the board and capture of a larger group. Of course, there must be no Black stones along the path to the edge or else Black can escape capture. White should capture Black only if a Black stone threatens the ladder pattern.

Black should not play at z, but should play on a point along the path to the edge of the board, attack the adjacent White stones, or play an attacking move elsewhere.

****The Crane's Nest****

The "crane's nest" is shown to the right of the ladder (figure 12). Even though it looks like Black might be able to escape capture, Black is lost here and should not play at x or v. If Black plays at v, White plays at u. If Black plays at x, White plays at w.

White should not play at x or v either, since Black can always be surrounded.

****Geta****

The "geta" pattern is shown in the upper right center around the t (figure 12). Black is lost if White plays at t. If it is Black's turn, Black must play at t to escape capture.

****Similar Patterns****

The above three patterns represent all the types of special GO patterns. Specific situations will vary in the placement of the extraneous stones.

You should evaluate each stone pattern to determine if it fits one of the examples above.

You should also keep in mind that often an indirect play, on a point next to a point adjacent to a group or territory, can result in greater advantage than a direct attack.

*****End of Game and Scoring*****

****End of Game****

A game only ends when one player resigns, or when both players pass their turns and agree the game is finished.

You should then follow the strict procedure given below to count the captured stones and surrounded territory.

****Possible Captures****

First, resolve all points where captures can still be made, by protecting the stones from capture or finalizing a capture. Usually, there will be none of these situations since the players will not pass their turns when they have a chance to capture or protect stones from capture. However, GO is complex and situations may only be discovered when the scoring analysis starts. Also, the resolution of one group or pattern during the scoring may affect a second group and so require its capture or protection.

First, resolve all ko patterns (described above), so that no more captures are possible by protecting the stones from further capture. This usually requires more plays, so the game continues until these situations are finalized.

Next, resolve all other uncertain capture situations. This usually requires more plays, so the game continues until these situations are finalized.

The players may agree not to complete the capture situations where the outcome is certain, but if the players cannot agree on a resolution, the game continues until these situations are finalized.

In Figure 13, the game continues as Black plays on the x and White on the y. The x in the upper left corner resolves a ko.

However, if a stone played to capture or to protect will disturb a deadlocked situation (in which neither player can move without causing loss of stones), fill the territory at the empty points with stones of the needed color, so that no captures are made and the territory is kept neutral.

No points are actually added or subtracted during any of the actions of this section.

****Corner Pattern****

Second, check the board for the special corner pattern shown (figure 12a).

```
+ + O O O
+ + O M M
O O + M +
O M M M O
O M + O +
```

Figure 12a

19 233 + 121 w w w 127 + 231 + 139 f f f 131 + 193 +
 133
 18 + 27 25 w + w 125 67 71 135 137 138 f 34 13 + + 89
 195
 17 29 215 x 235 w 123 63 18 68 72 73 136 f 32 15 17 3 w
 +
 16 f 23 ^{^*} 1 ^{^^*} 28 ^{^*} 129 x 223 61 69 140 134 211 207 35 6 16 14 31
 +
 15 110 108 104 106 204 202 187 f f f f f 226 209 37 236 33 +
 +
 14 + + 10 + + 208 194 f f f 162 241 f 213 f 238 239 +
 +
 13 + + 230 + + + 196 189 f 168 161 190 f f f 22 185
 219 +
 12 + 234 b 232 + + 192 201 184 169 + 173 172 f f 217 x +
 +
 11 + + + 228 + + 210 182 159 + 229 + 171 170 220 218 175 +
 +
 10 + + + 230 b b b 180 163 + + 167 155 188 221 179 +
 181 +
 9 178 174 94 158 212 200 198 + 82 165 157 166 186 f 177 + 243
 183 237
 8 + + + + 88 199 197 84 b 86 164 + + 244 79 81 85 91
 222
 7 176 160 12 156 216 f f f 58 + + + + 130 83 46 50 52
 y
 ^
 6 57 87 f f 19 f f f 214 + + + 132 105 44 43 206 51
 92
 5 w 49 41 93 f 90 f 74 70 78 66 60 + [^] 118 b [^] 40 ^{^*} 39 [^] 42
 112
 4 w w w 45 5 f 76 11 75 141 65 59 62 + b 20 [^] 7 38
 b
 3 + 53 47 + 95 96 77 149 + + 143 64 + 8 + b [^] 36 b
 b

```

2 w w + 101 97 98 148 147 151 145 144 + 248 + 142 114 b b
240
^
1 + + 103 + 99 247 + + 245 150 246 154 152 146 + 116 80
242 b
a b c d e f g h i k l m n o p q r s
t

```

Figure 14

****Remove Black's Stones from White Territories****

Fifth, remove Black stones in White's territory and give them to White as captured stones. Remove all Black stones in White's territory that both players have agreed cannot escape being captured. Comparing figures 13 and 14 shows the Black stones removed.

Black stones inside White territory that are found to be part of a threat to attack White (together with Black stones outside the surrounded territory) must actually be captured by using White stones. If this capturing possibility was overlooked in the first scoring step, the scoring procedure returns to the first step so that the captures can be made.

No points are actually added or subtracted during any of the actions of this section.

****Remove White's Stones from Black Territories****

Sixth, remove White stones in Black's territory and give them to Black as captured stones. Remove all White stones inside Black's territory that both players have agreed cannot escape being captured. Comparing figures 13 and 14 shows the White stones removed.

White stones inside Black territory that are found to be part of a threat to attack Black (together with White stones outside the surrounded territory) must actually be captured by using Black stones. If this capturing possibility was overlooked in the first scoring step, the scoring procedure returns to the first step so the captures can be made.

No points are actually added or subtracted during any of the actions of this section.

```

a b c d e f g h i k l m n o p q r s
t
19 233 B 121 B B B 127 B 231 B 139 f f f 131 B 193 B
133
18 B 27 25 B B B 125 67 71 135 137 138 f 34 13 B B 89
195

```


17 29 215 x 235 B 123 63 18 68 72 73 136 f 32 15 17 3 B
B
^* ^^* ^*
16 f 23 1 28 129 x 223 61 69 140 134 211 207 35 6 16 14 31
B
15 110 108 104 106 204 202 187 f f f f f 226 209 37 236 33 B
B
14 W W 10 W W 208 194 f f f 162 241 f 213 f 238 239 B
B
13 W W 230 W W W 196 189 f 168 161 190 f f f 22 185
219 B
12 W 234 W 232 W W 192 201 184 169 B 173 172 f f 217 x B
B
11 W W W 228 W W 210 182 159 B 229 B 171 170 220 218 175 B
B
10 W W W 230 W W W 180 163 B B 167 155 188 221 179 B
181 B
9 178 174 94 158 212 200 198 W 82 165 157 166 186 f 177 B 243
183 237
8 W W W W 88 199 197 84 W 86 164 W W 244 79 81 85 91
222
7 176 160 12 156 216 f f f 58 W W W W 130 83 46 50 52
Y
^
6 57 87 f f 19 f f f 214 W W W 132 W 44 W 206 W
92
5 B 49 41 93 f 90 f 74 70 78 66 60 W 118 W 40 W 42
112
4 B B B 45 5 f 76 11 75 141 65 59 62 W W 20 W 38
W
3 B 53 47 B 95 96 77 149 B B 143 64 W 8 W W 36 W
W
2 B B B 101 97 98 148 147 151 145 144 W 248 W 142 114 W W
240
^
1 B B 103 B 99 247 B B 245 150 246 154 152 146 W 116 80
242 W

t a b c d e f g h i k l m n o p q r s

Figure 15

****Counting White's Territory****

Seventh, fill the White territory with White stones. Territory consists only of unoccupied points, so points occupied by White stones are not counted. (There are no Black stones in White territory after the fifth step.) The y's of figure 14 show the points to be filled by White.

The number of White stones used is added to White's score.

****Counting Black's Territory****

Eighth, fill the Black territory with Black stones. Territory consists only of unoccupied points, so points occupied by Black stones are not counted. (There are no White stones in Black territory after the sixth step.) The x's of figure 14 show the points to be filled by Black.

The number of Black stones used is added to Black's score.

****Counting Black's Captured Stones****

Ninth, subtract the number of captured Black stones from Black's score.

****Counting White's Captured Stones****

Tenth, subtract the number of captured White stones from White's score.

****Scoring****

The player with the higher score is the winner.

Sometimes, White is given 4.5 or 5.5 extra points to offset Black's advantage in starting first. This also ensures there are no ties. The decision whether to use these extra points should be made before the game begins.

****Analysis of Scoring****

There should be a difference in score of less than 20 points. If the difference is more, the handicap should be changed. Handicap stones are worth about 10 points each for Black.

Also, there should be less than 20 captures each in a well-played game.

*****Strategy Summary*****

****Choosing the Best Move****

Memorize and understand the best move to make in each of the many local patterns. Understand the purpose of the series of moves made to reach or escape from a pattern. Know the influences of the stones in the patterns.

Choose the move that is both offensive and defensive over a purely offensive or defensive one. Each series of moves should have both an offensive and defensive purpose.

In general, play first in the corners, then on the sides, then in the center, to gain the most territory.

Make walls and corners if you can.

****Filling Open Areas****

Memorize and understand the best sequence of moves for each type of open area: corner, middle of side, side between middle and corner, center of board, between middle of side and center, between corner and center.

Try to place your first stone at the position with maximum influence, the next at the next largest influence, and so on.

Stones nearer the middle have more influence.

Do not place your stone adjacent to any of your own strong stones. Do not overlap the influences of your stones.

Do not place your stone adjacent to any of opponent's strong stones. Do not overlap the influences of opponent's strong stones.

Stones on the third line can generally hold side territory, but not center territory.

Stones on the fourth line can generally hold center territory, but not side territory.

****Building Safe Groups of Stones****

Do not try for a long or large group of stones at first.

Make small groups of stones with an eye. They should have a path to the center of the board.

Make small groups of stones safe by adding an eye, linking to another group of stones with an eye by a straight line connection, or extending a straight line toward the center of the board.

Try to link your groups of stones with only one straight-line connection. Plan the connection to avoid connecting more than once.

Connections always run along a side or toward the center. A side connection should not be along the edge or one row in from the edge. If a connection is more than six rows from the side, it is a center

connection. A center connection wall should not allow the opponent to wall off more territory than you.

****Playing in a Corner****

In a corner, you need a stone on the third line and one on the fourth line, separated by one or two spaces (as in all openings).

In a corner, you want to have a safe stone or point where the third lines cross (the 3-3 point).

****Extending****

To extend toward the center, follow a straight line but skip a point between stones. If the opponent tries to play in that point, you can threaten that stone on its side and then connect with a C shape.

To extend along the side, start with the farthest stone and follow a straight line, but skip a point between stones. Any play to that point allows you to make a C-shaped connection, as before.

To extend the tip of a group, start with the stone at the tip and follow a straight line, but skip a point between stones. Any play to that point allows you to make a C-shaped connection, as before.

To extend from a wall (or the wide part of a group), place a stone at a distance one point wider than wall width, perpendicular to the middle of the wall. The number of empty points is the same as the width of the wall.

****Attacking and Defending Groups of Stones****

Cut into a group only on the side of the group that has no chance to make eyes. Attack opponent's weakest groups first.

Fortify your weakest group first.

Do not attack strong groups; instead, fortify your weakest group.

Only sacrifice a stone if it is the best offensive AND defensive move.

****Playing the Game****

Now try playing the sample game.

Then play a game with yourself, following the rules and principles given above.

Then find an opponent more skillful than you.

As you play, you will learn many more examples of good play, and with this experience you will master the game of GO.

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