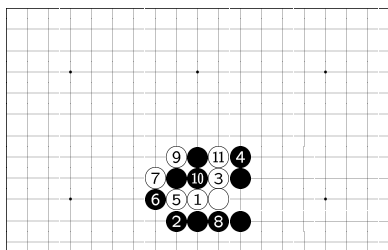
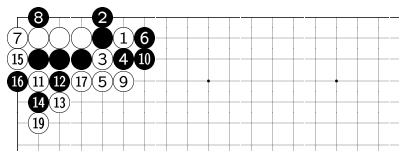


gengen gokyo

(solutions)

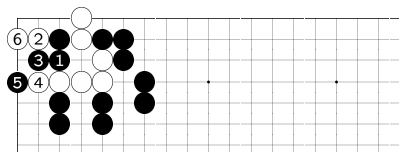


problem 1

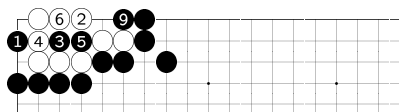


problem 2

18 at 11

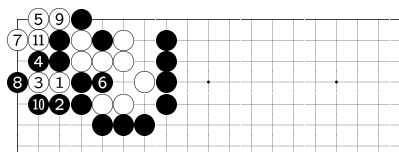


problem 3

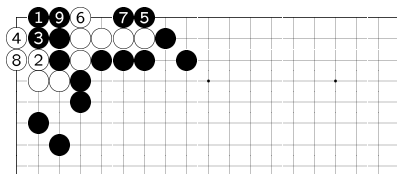


problem 4

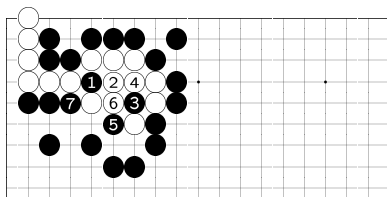
7 at 5, 8 at 3



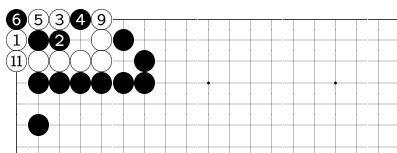
problem 5



problem 6

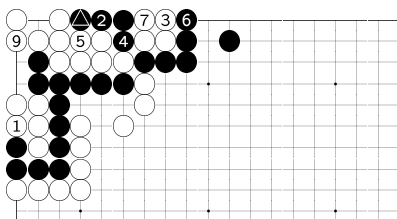


problem 7



problem 8

7 at 5, 8 at 3, 10 at 6



problem 9

8 at 2, 10 at 4, 11 at 6

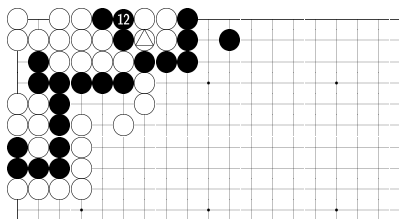
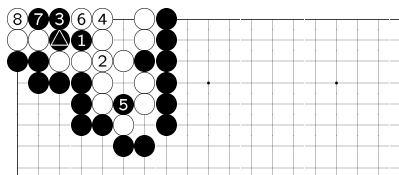


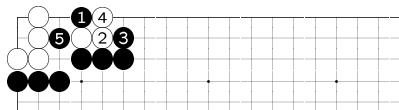
Diagram 2: 12-13

13 at

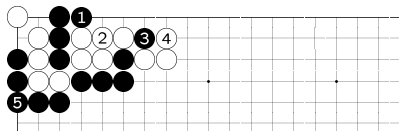


problem 10

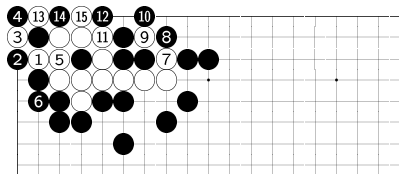
9 at



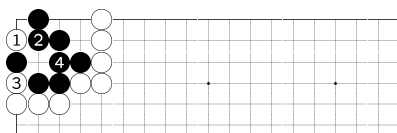
problem 11



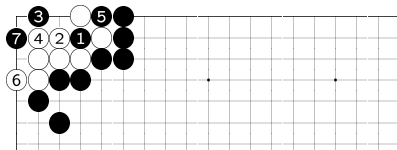
problem 12



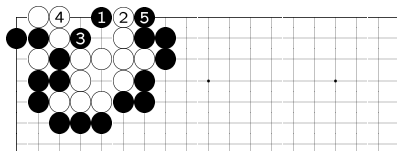
problem 13



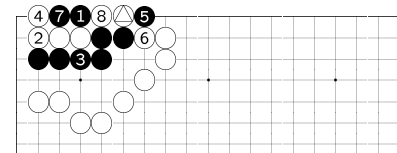
problem 14



problem 15

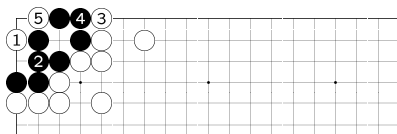


problem 16

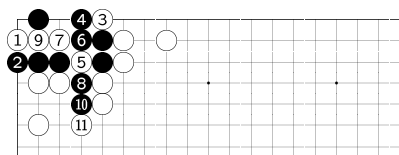


problem 17

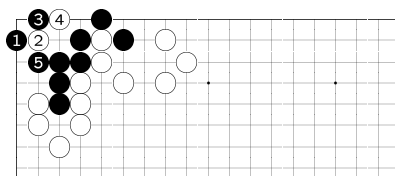
9, 13 at 1, 10 at , 11 at 7, 12 at 8



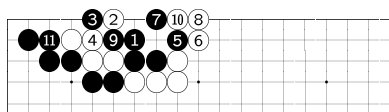
problem 18



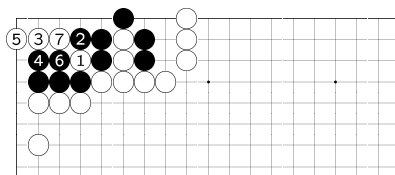
problem 19



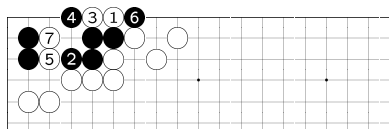
problem 24



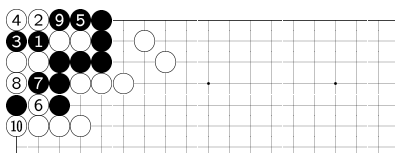
problem 20



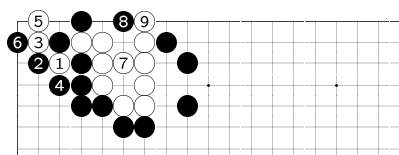
problem 25



problem 21

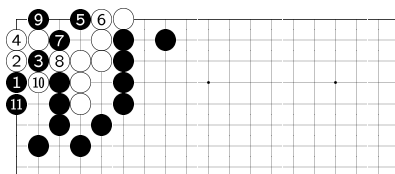


problem 26

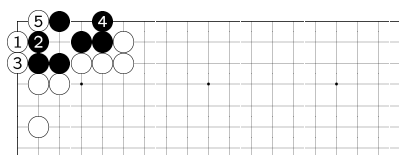


problem 22

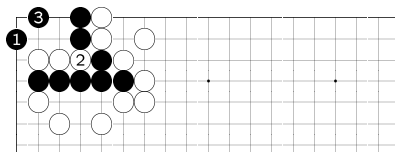
11 at 1



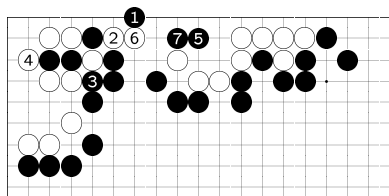
problem 27



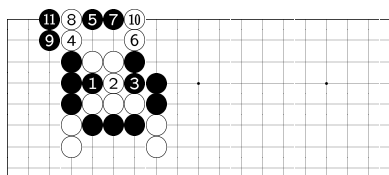
problem 23



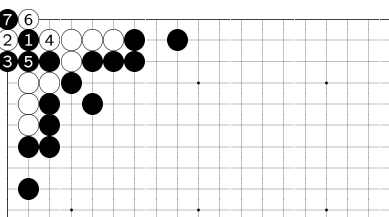
problem 28



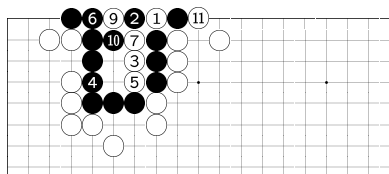
problem 39



problem 40

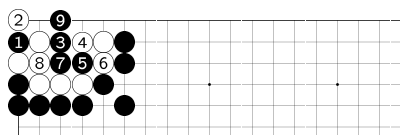


problem 41

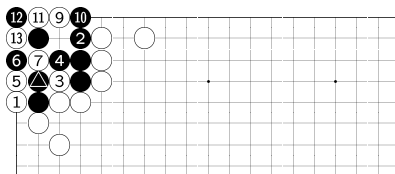


problem 42

⑧ at ①

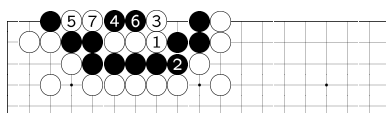


problem 43



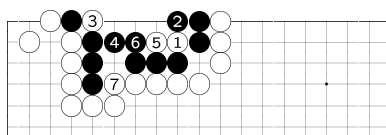
problem 44

⑧ at ▲

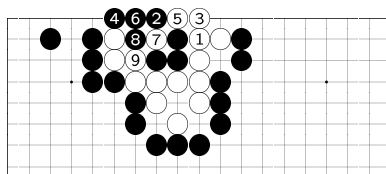


problem 45

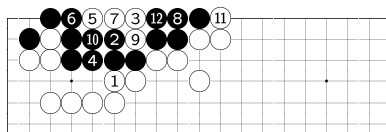
⑧, ⑫ at ④, ⑨ at ⑤, ⑩ at ⑥, ⑪ at ⑦



problem 46

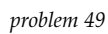


problem 47



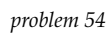
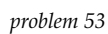
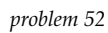
problem 48

⑬ at ⑦

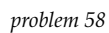
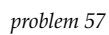
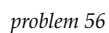


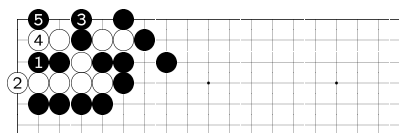
problem 50

problem 51

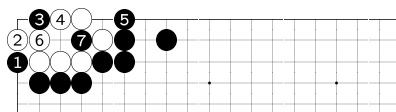


problem 55

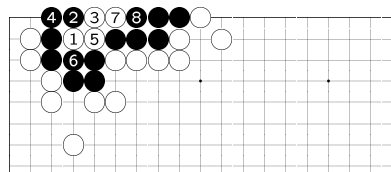




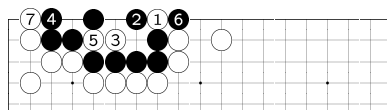
problem 59



problem 64

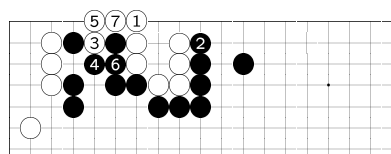


problem 60

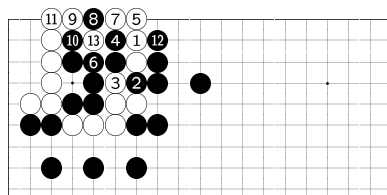


problem 65

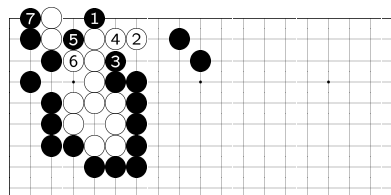
⑨ at ⑤



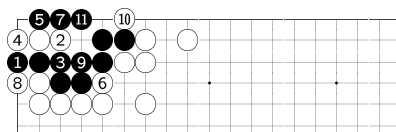
problem 61



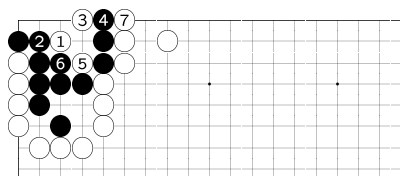
problem 66



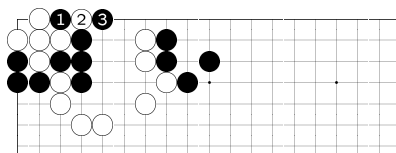
problem 62



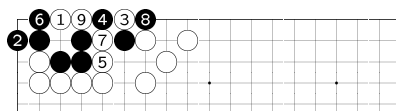
problem 67



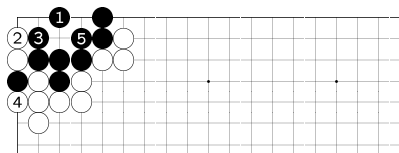
problem 63



problem 68



problem 69



problem 70

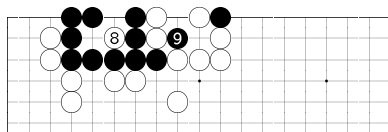
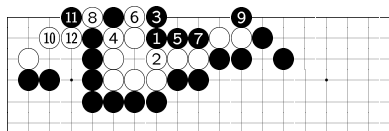
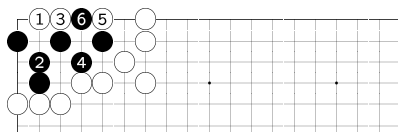


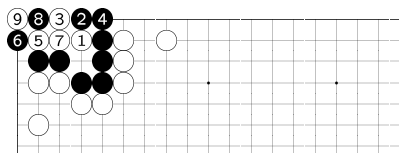
Diagram 2: 8-9



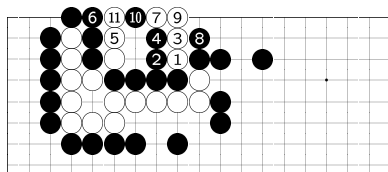
problem 71



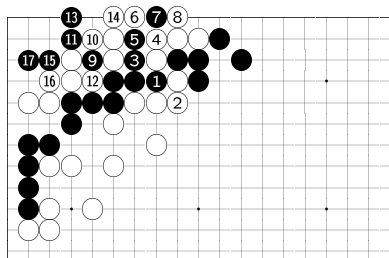
problem 75



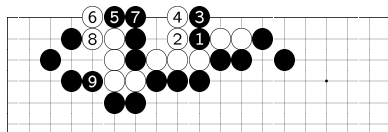
problem 72



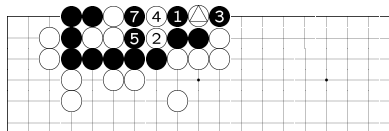
problem 76



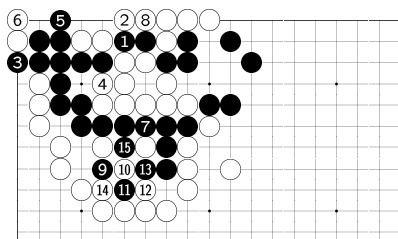
problem 73



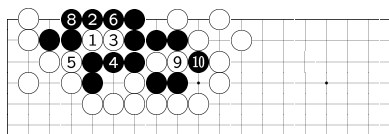
problem 77



problem 74

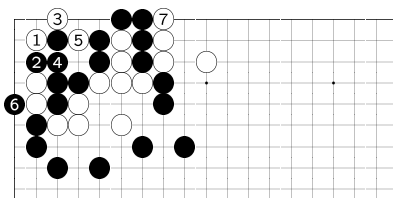


problem 78

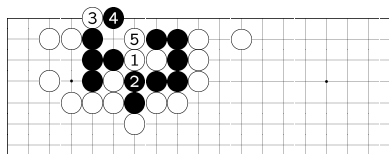


problem 79

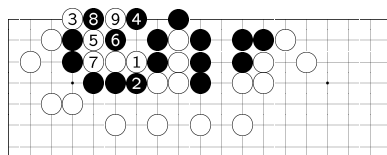
⑦ at ①, ⑪ at ⑨



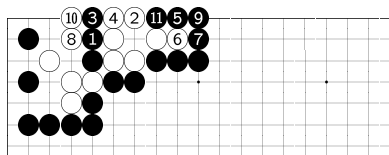
problem 84



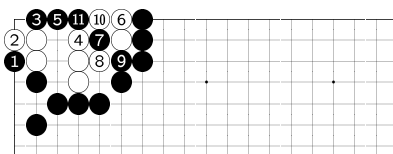
problem 80



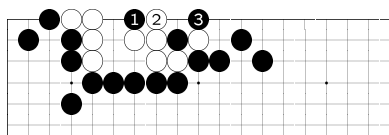
problem 85



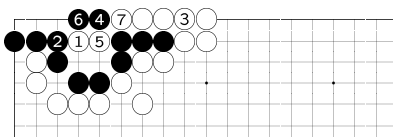
problem 81



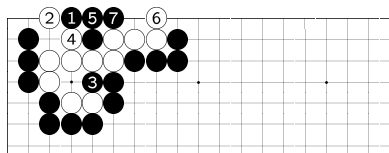
problem 86



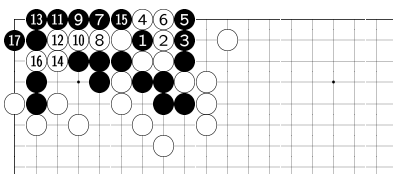
problem 82



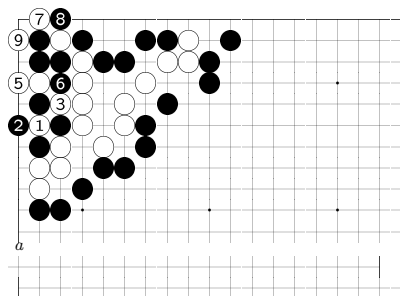
problem 87



problem 83

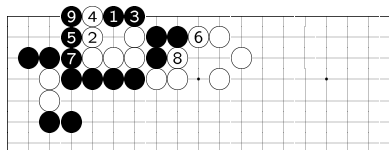


problem 88

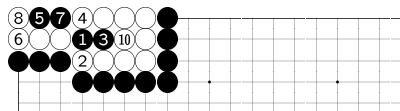


problem 89

4 at 1

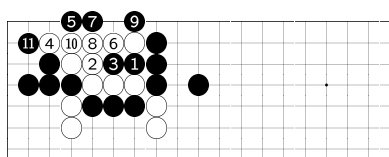


problem 90

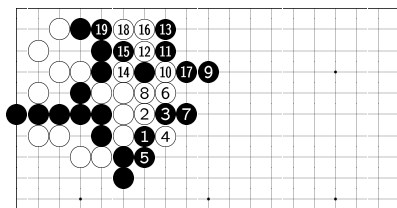


problem 91

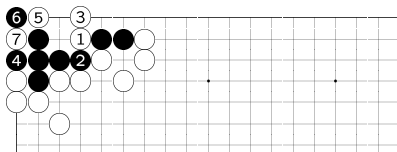
9 at 7, 11 at 1



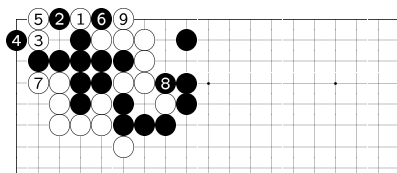
problem 92



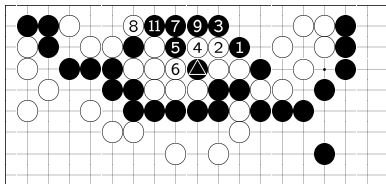
problem 93



problem 94



problem 95



problem 96

10 at ▲

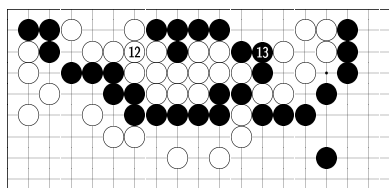
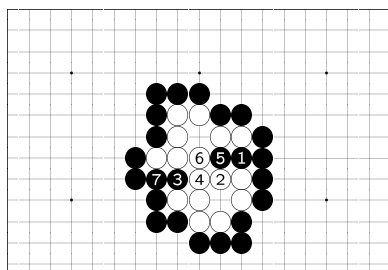
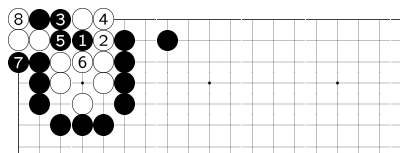


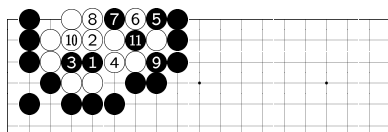
Diagram 2: 12-13



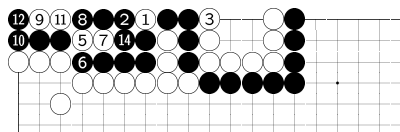
problem 100



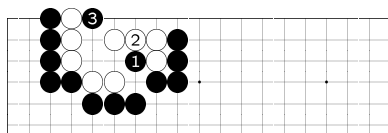
problem 97



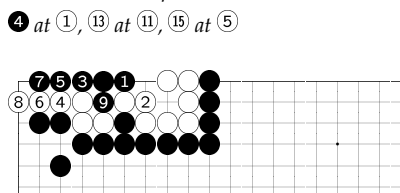
problem 101



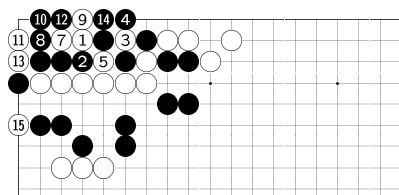
problem 98



problem 102



problem 99

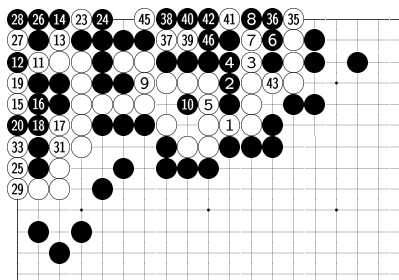


problem 103

9 at 5

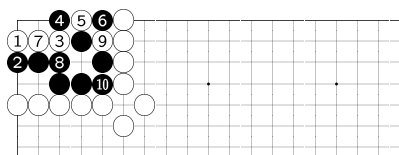
4 at 1, 13 at 11, 15 at 5

6 at 3



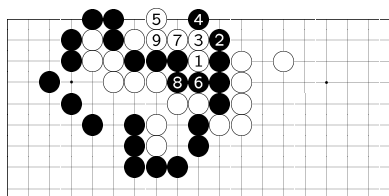
problem 104

(21), (34) at (19), (22) at (15), (30) at (23), (32) at (27), (44) at (41), (47) at (37)

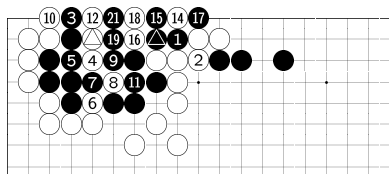


problem 105

(11) at (5)

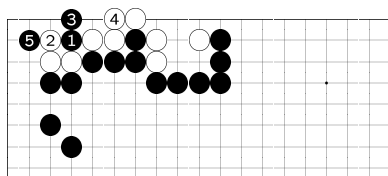


problem 106

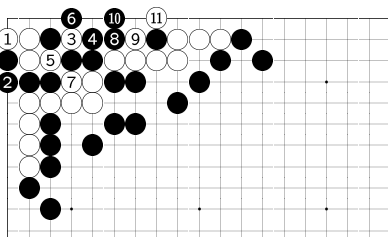


problem 107

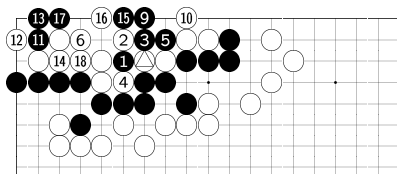
(13) at (8), (20) at (14), (22) at (19), (23) at (23)



problem 108



problem 109



problem 110

(7) at (1), (8) at (19)

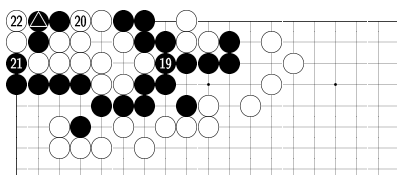


Diagram 2: 19-23

(23) at (23)

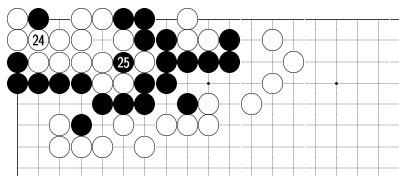
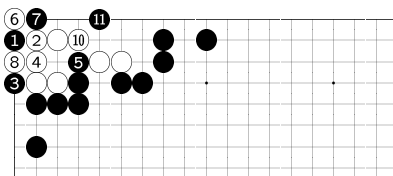
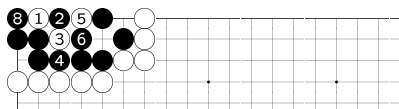


Diagram 3: 24-25

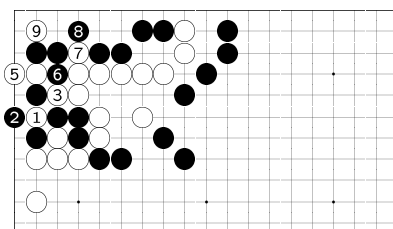


problem 115



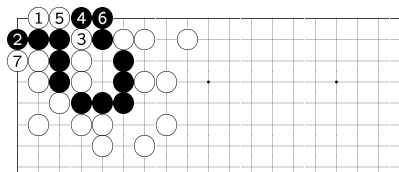
problem 111

⑦, ⑨ at ②

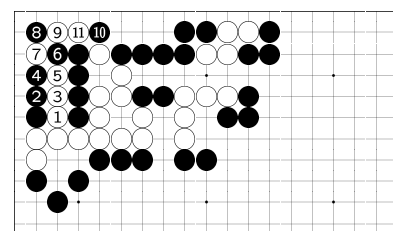


problem 116

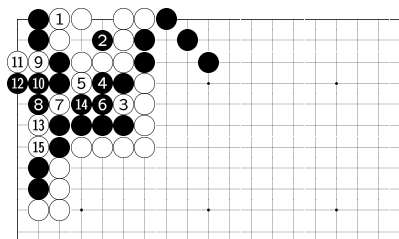
④ at ①



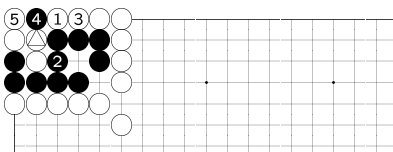
problem 112



problem 117

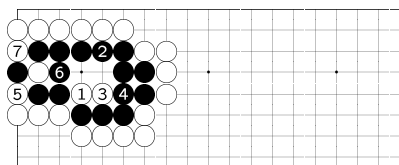


problem 113



problem 118

⑥ at ④, ⑦ at △



problem 114

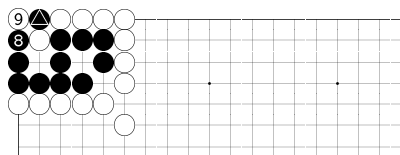
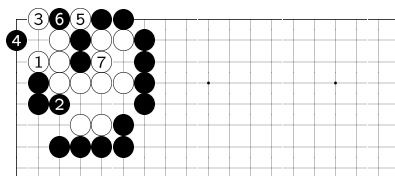
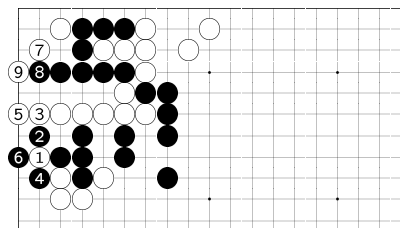


Diagram 2: 8-10

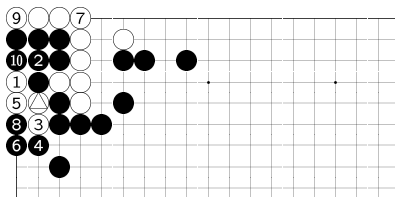
10 at



problem 123

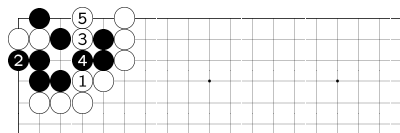


problem 119

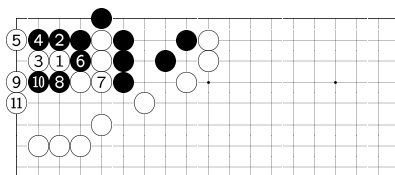


problem 124

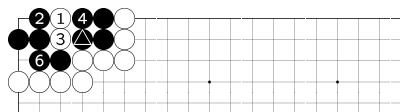
11 at



problem 120

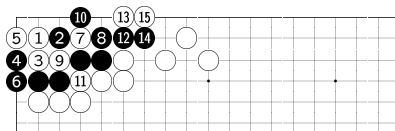


problem 125

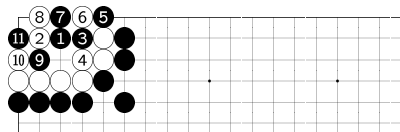


problem 121

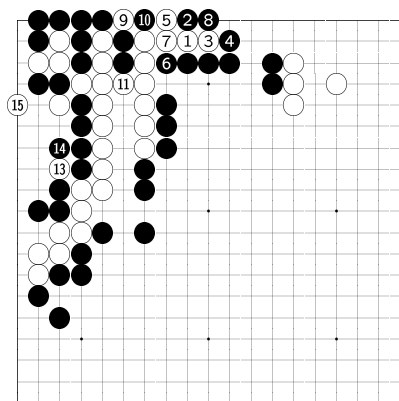
5 at (3), 7 at (1), 8 at



problem 126

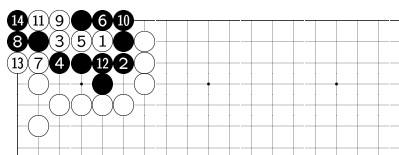


problem 122



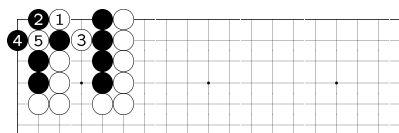
problem 127

12 at 9

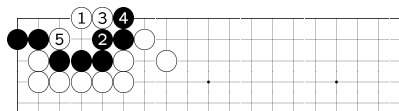


problem 128

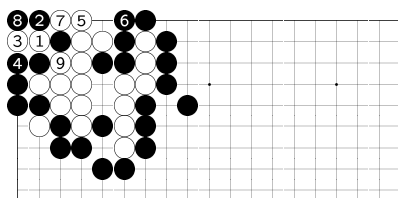
15 at 3



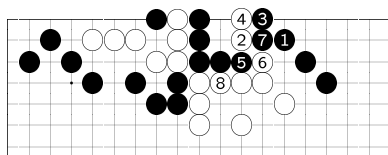
problem 129



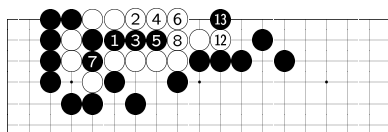
problem 130



problem 131

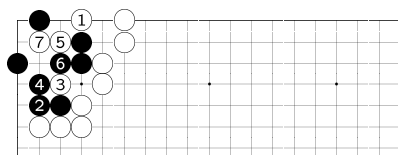


problem 132

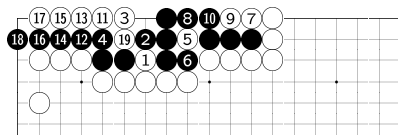


problem 133

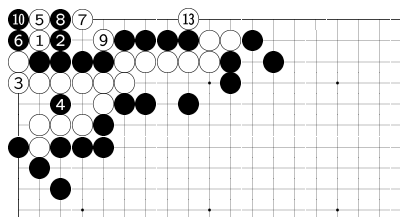
9 at 3, 10 at 1, 11 at 7



problem 134

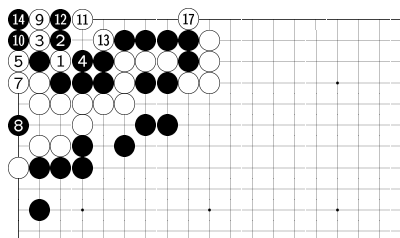


problem 135



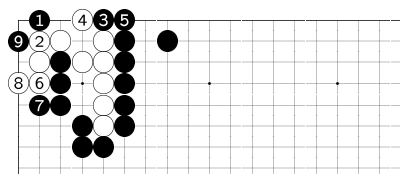
problem 136

⑪ at ①, ⑫ at ⑤

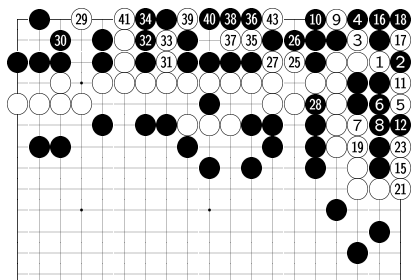


problem 137

⑥ at ①, ⑮ at ③, ⑯ at ⑨

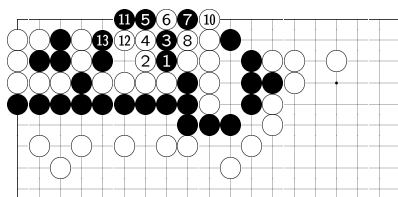


problem 138



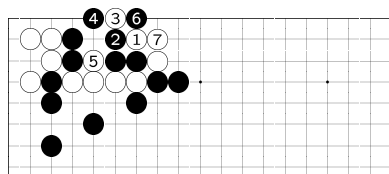
problem 139

⑬, ②④ at ⑪, ⑭ at ⑤, ⑳ at ⑨, ㉒ at ⑰, ④② at ㉓

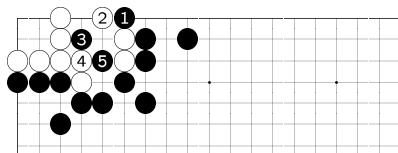


problem 140

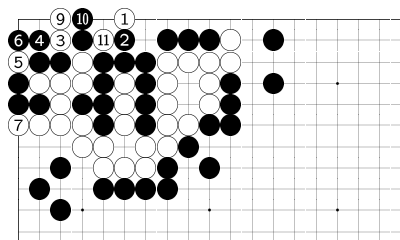
⑨ at ⑥



problem 141

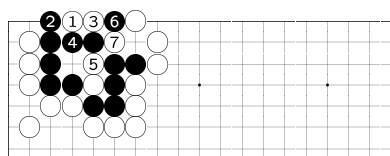


problem 142

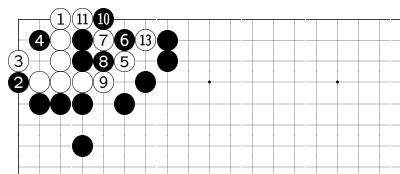


problem 143

8 at 5

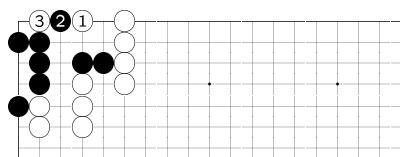


problem 144

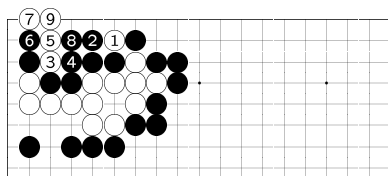


problem 145

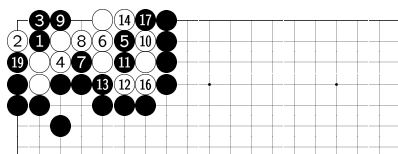
12 at 7



problem 146

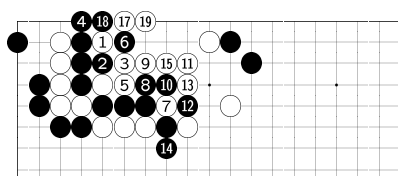


problem 147



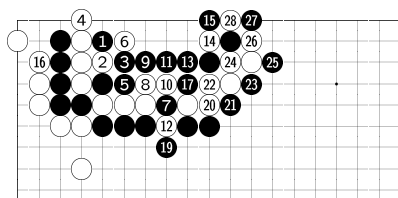
problem 148

15 at 11, 18 at 5



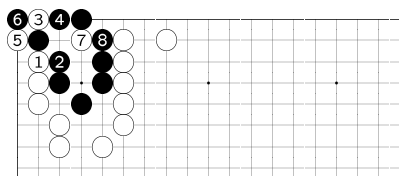
problem 149

16 at 7



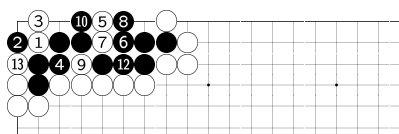
problem 150

18 at 7



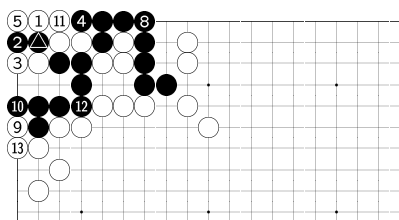
problem 151

⑨ at ③



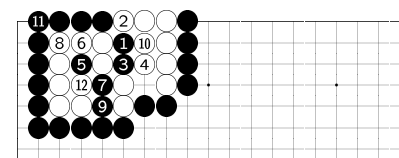
problem 152

⑪ at ⑦



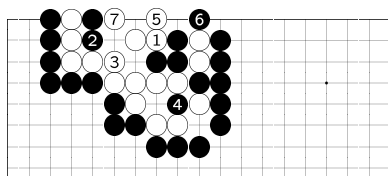
problem 153

⑥ at △, ⑦ at ②

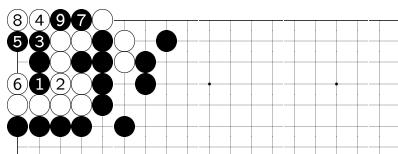


problem 154

⑬ at ③

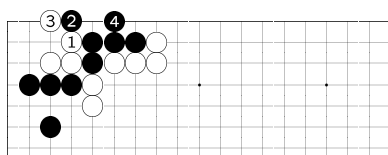


problem 155

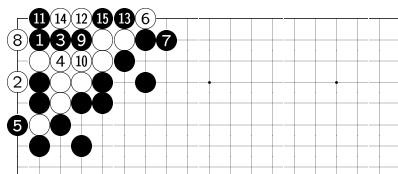


problem 156

⑩, ⑭ at ④, ⑪ at ⑦, ⑫ at ⑧, ⑬ at ⑨

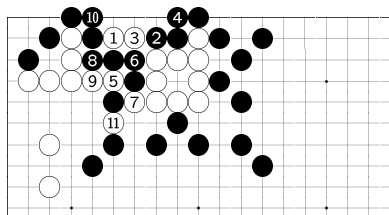


problem 157

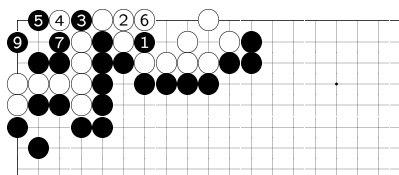


problem 158

⑯ at ⑫, ⑰ at ⑬

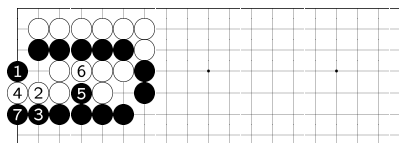


problem 159

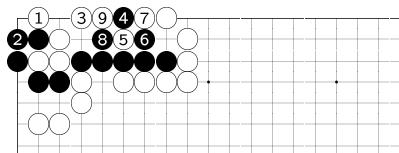


problem 160

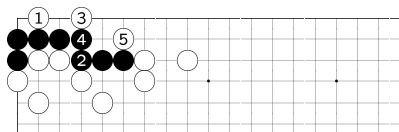
⑧ at ③



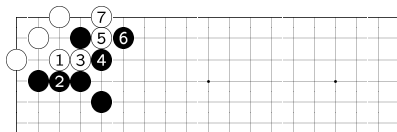
problem 161



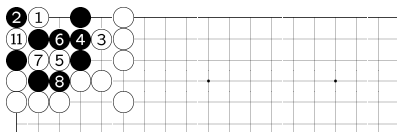
problem 162



problem 163

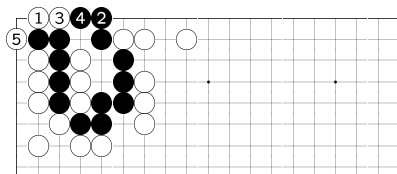


problem 164

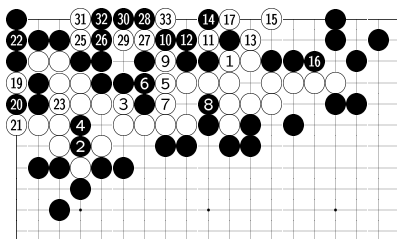


problem 165

⑨ at ⑦, ⑩ at ⑤

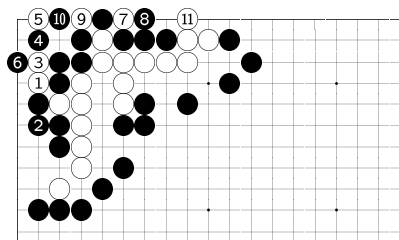


problem 166

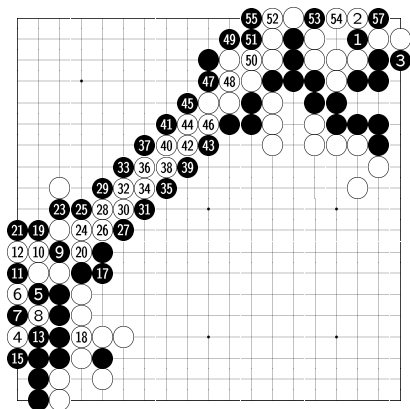


problem 167

⑩ at ⑪, ②④ at ⑰

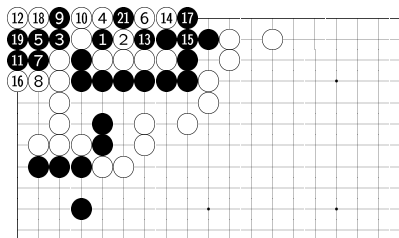


problem 168



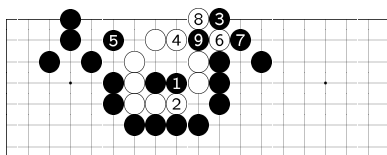
problem 169

⑭ at ⑦, ⑯ at ⑪, ⑳ at ⑨, ㉔ at ⑤③

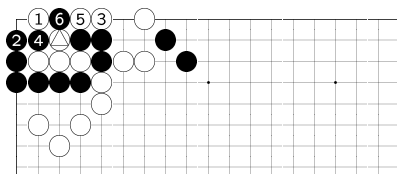


problem 170

㉒ at ⑱, ㉔ at ⑥, ㉔ at ⑭, ㉔ at ⑫, ㉔ at ㉑

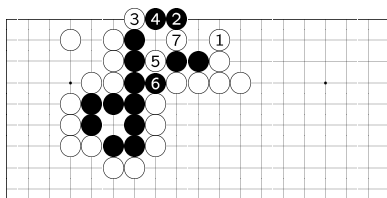


problem 171

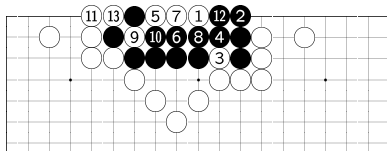


problem 172

⑦ at △

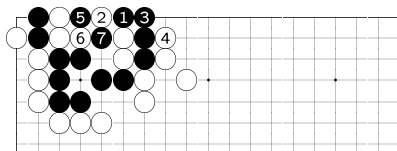


problem 173

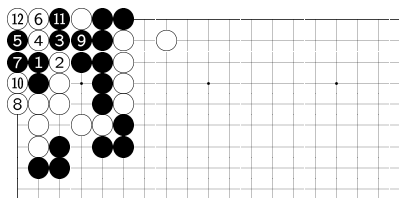


problem 174

⑭ at ⑦, ⑮ at ⑨

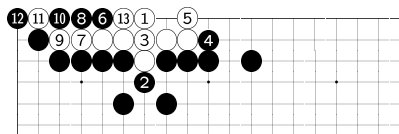


problem 175

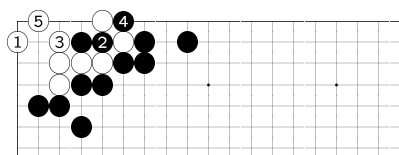


problem 176

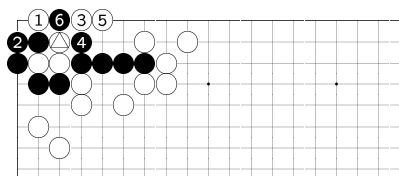
13 at 1



problem 177

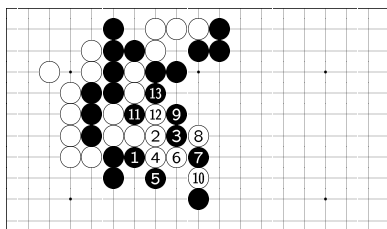


problem 178

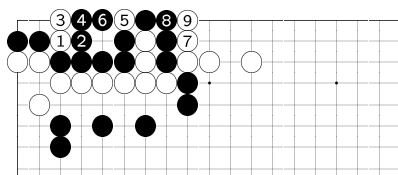


problem 179

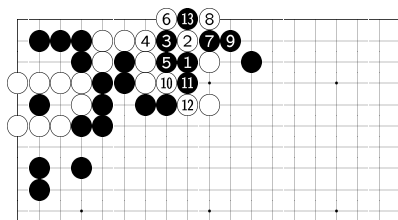
7 at 7



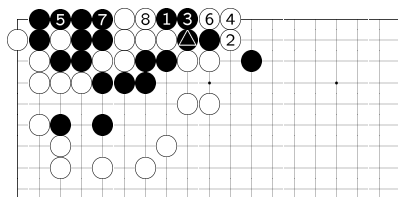
problem 180



problem 181

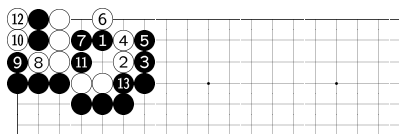


problem 182

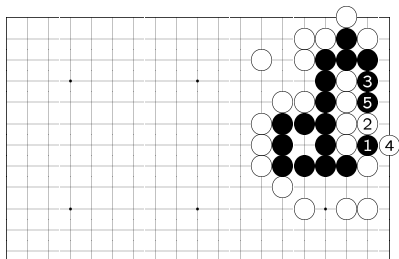


problem 183

9 at 9



problem 184



problem 185

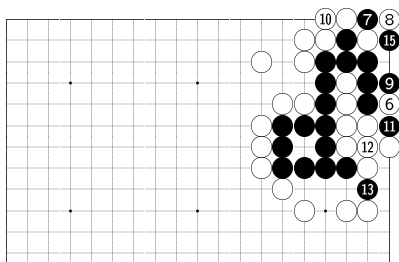
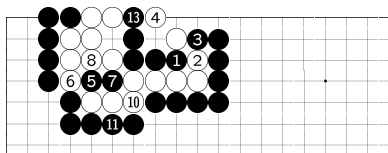


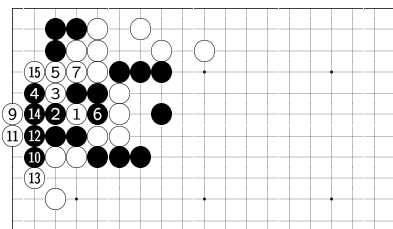
Diagram 2: 6-17

⑭ at ⑥, ⑯ at ⑦, ⑰ at ⑪



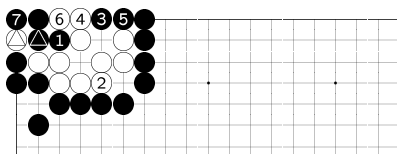
problem 186

⑨ at ⑦, ⑫ at ⑤



problem 187

⑧ at ①



problem 188

⑧ at △, ⑨ at △

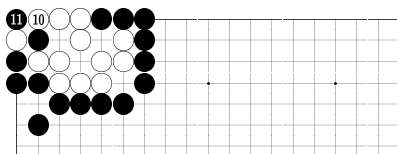
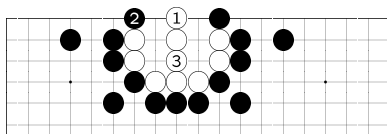
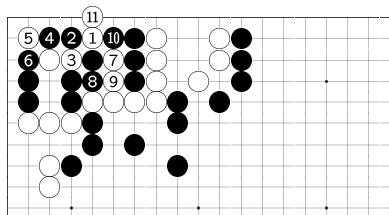


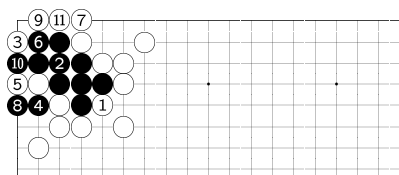
Diagram 2: 10-11



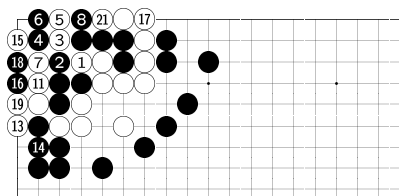
problem 189



problem 190

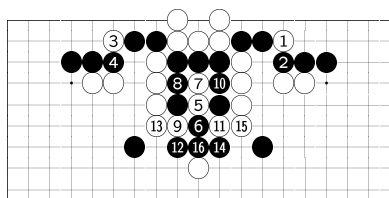


problem 191



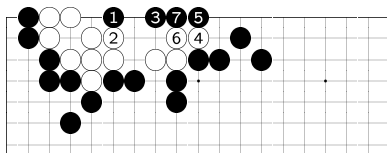
problem 192

⑨, ⑫ at ③, ⑩ at ⑤, ⑮ at ⑮

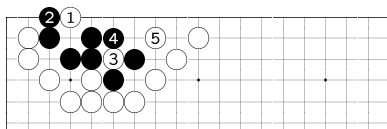


problem 193

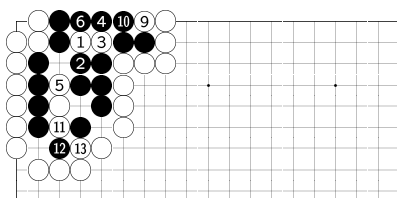
⑮ at ⑤



problem 194

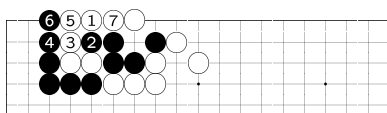


problem 195

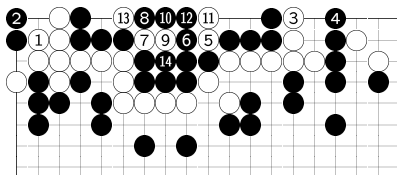


problem 196

⑦ at ③, ⑧ at ①

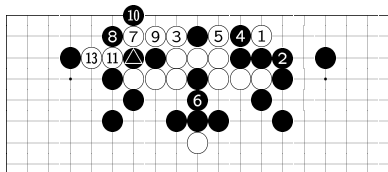


problem 197



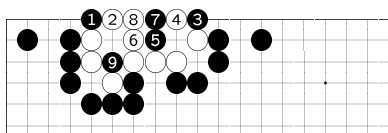
problem 198

⑮ at ⑦

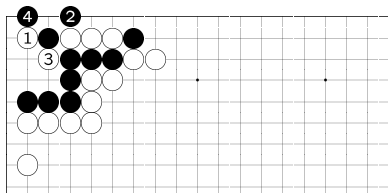


problem 199

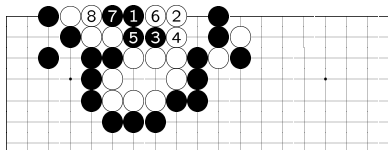
12 at



problem 200

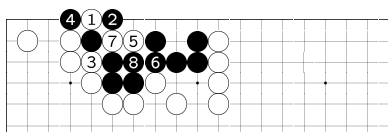


problem 201



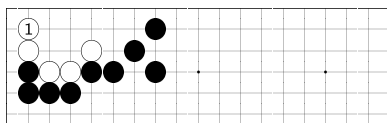
problem 202

9 at 5

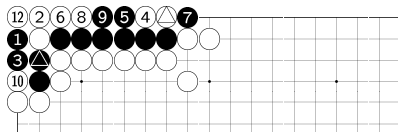


problem 203

9 at 1

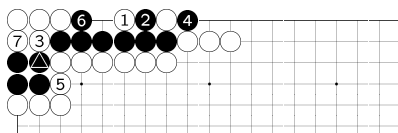


problem 204



problem 205

11 at , 13 at



problem 206

8 at

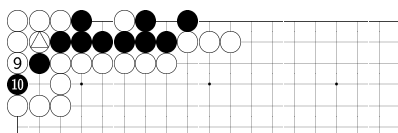


Diagram 2: 9-11

11 at

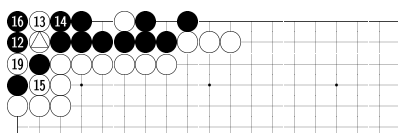
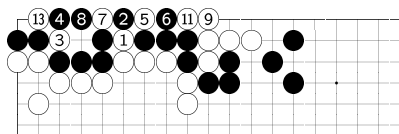


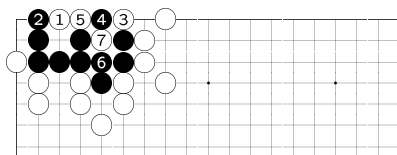
Diagram 3: 12-19

17 at , 18 at 13

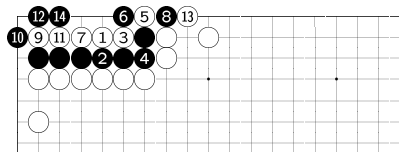


problem 207

10 at 7, 12 at 5

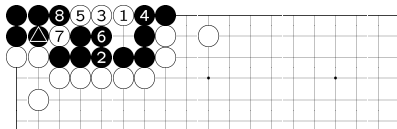


problem 212



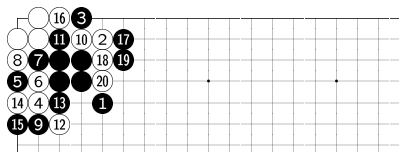
problem 208

15 at 5



problem 213

9 at 7, 10 at 1



problem 209

21 at 5

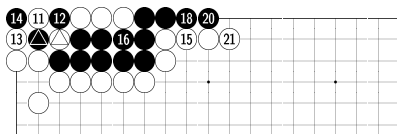
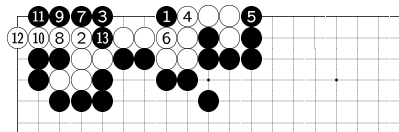


Diagram 2: 11-22

17 at 11, 19 at 1, 22 at 1



problem 210

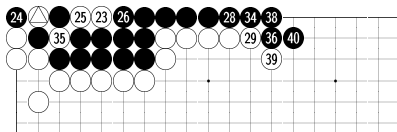
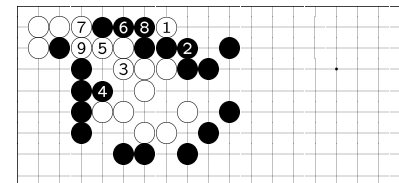
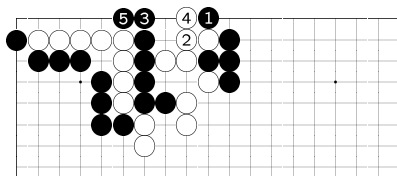


Diagram 3: 23-40

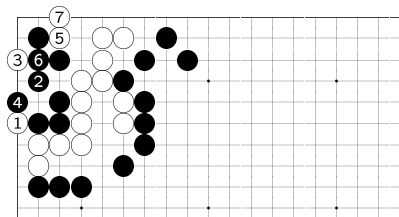
27, 33 at 1, 30 at 24, 31, 37 at 25, 32 at 23



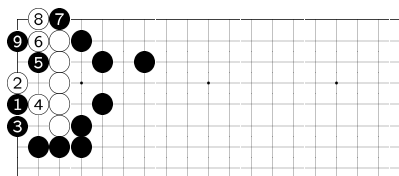
problem 211



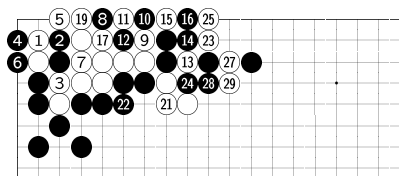
problem 214



problem 215

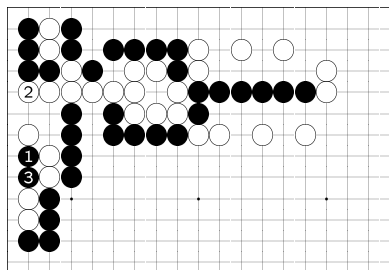


problem 216

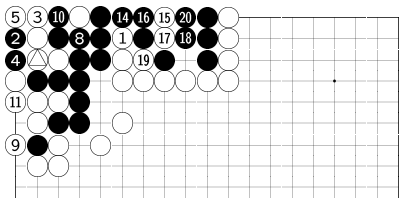


problem 217

18 at 11, 20 at 15, 26 at 13

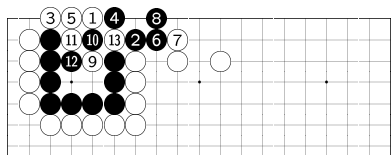


problem 218

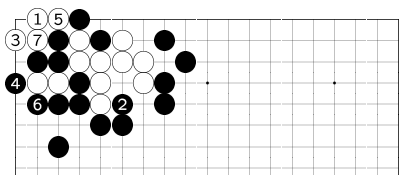


problem 219

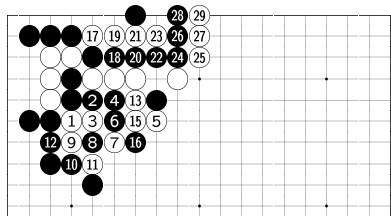
6, 12 at 4, 7 at 2, 13 at 1, 21 at 17



problem 220

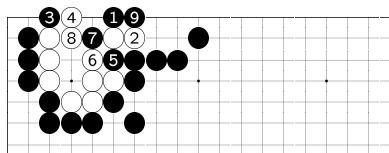


problem 221

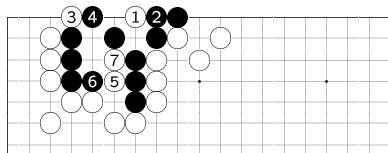


problem 222

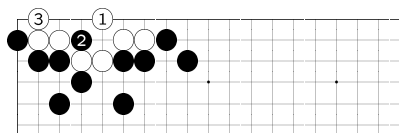
14 at 8



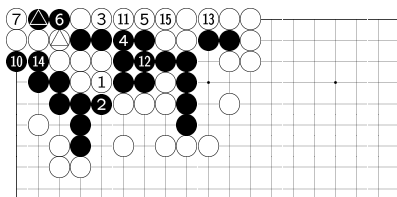
problem 223



problem 228

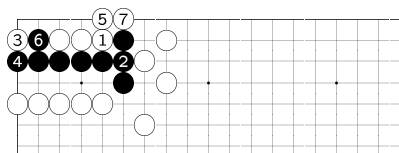


problem 224

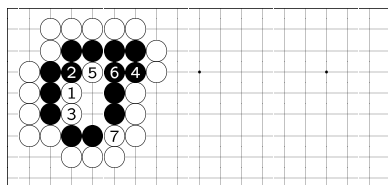


problem 229

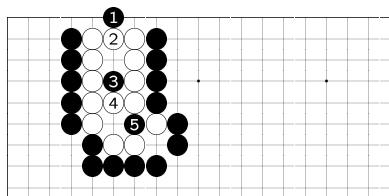
8, 16 at 6, 9 at \triangle , 17 at \triangle



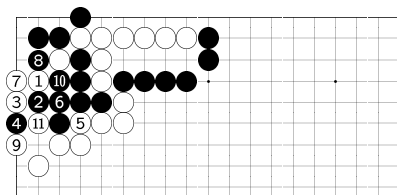
problem 225



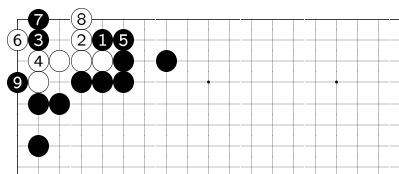
problem 230



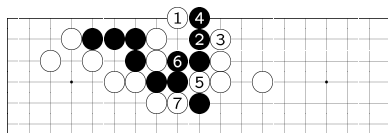
problem 226



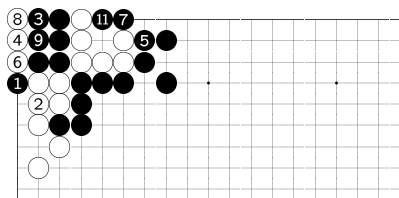
problem 231



problem 227

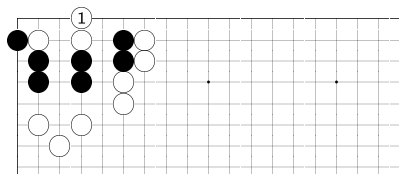


problem 232

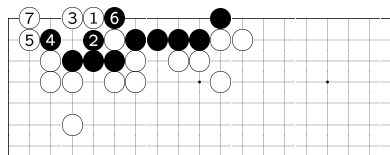


problem 233

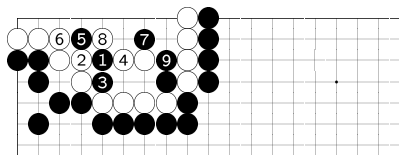
⑩ at ④



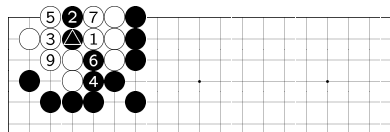
problem 234



problem 235

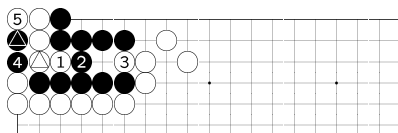


problem 236



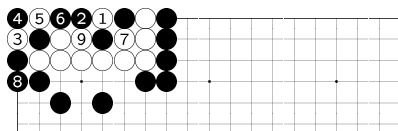
problem 237

⑧ at ▲, ⑩ at ②, ⑪ at ①

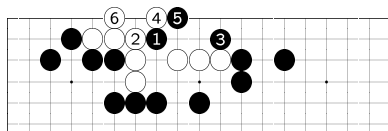


problem 238

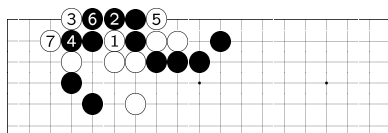
⑥, ⑧ at ④, ⑦ at ▲, ⑨ at △



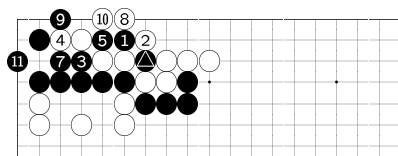
problem 239



problem 240

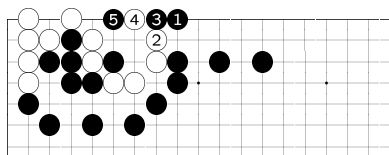


problem 241

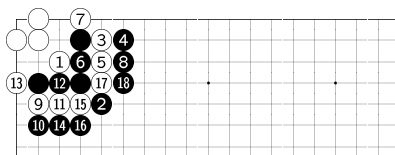


problem 242

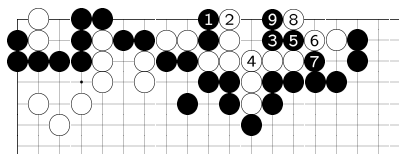
⑥ at ▲



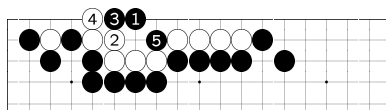
problem 243



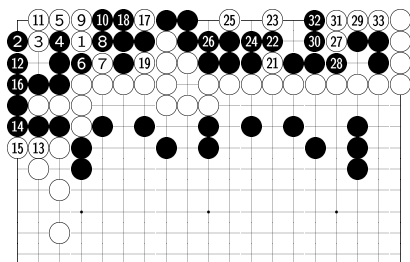
problem 248



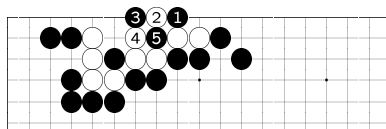
problem 244



problem 249

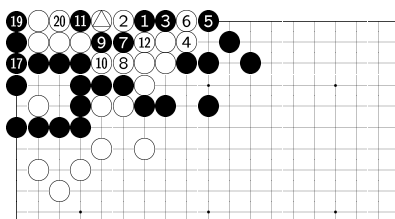


problem 245



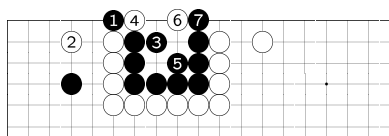
problem 250

20 at 17

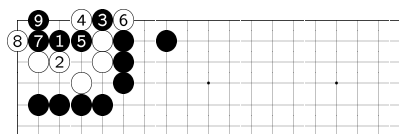


problem 251

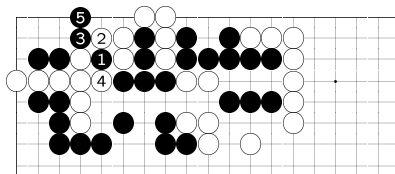
13 at \triangle , 14, 18 at 2, 15 at 1, 16 at 3, 21 at 9



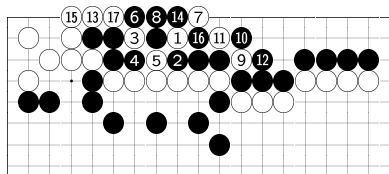
problem 246



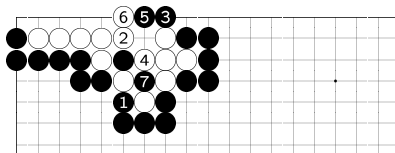
problem 247



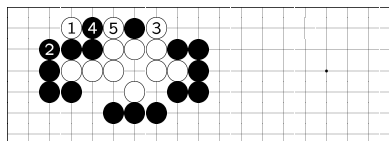
problem 252



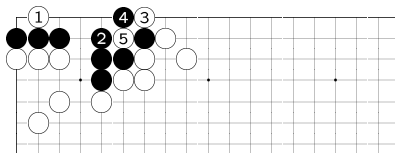
problem 253



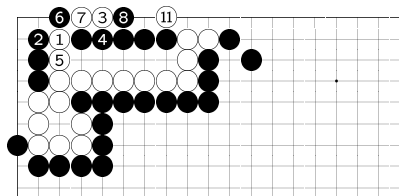
problem 258



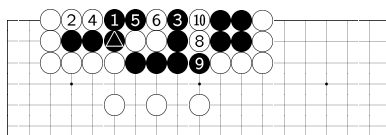
problem 254



problem 259



problem 255



problem 260

7 at

9 at 7, 10 at 3

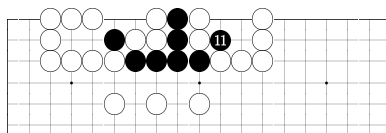
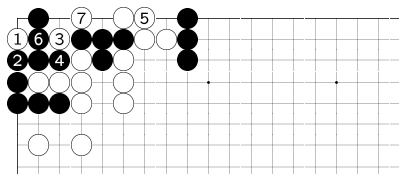
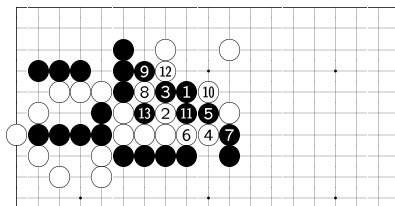


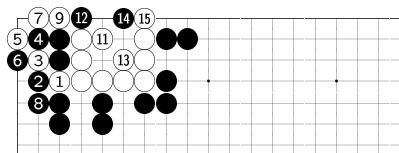
Diagram 2: 11



problem 256

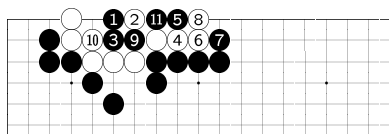


problem 261



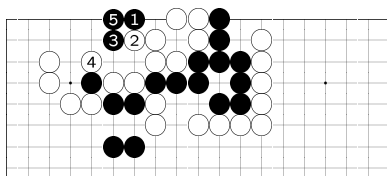
problem 257

10 at 3

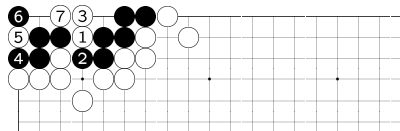


problem 262

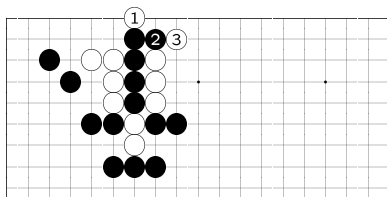
⑫ at ②, ⑬ at ⑪



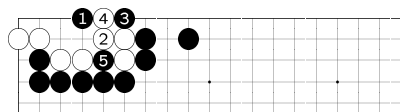
problem 267



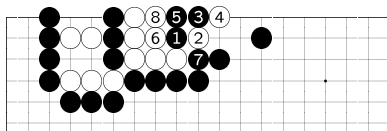
problem 263



problem 268

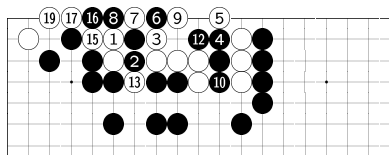


problem 264



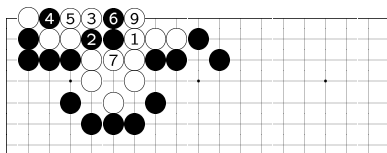
problem 269

⑨ at ⑤



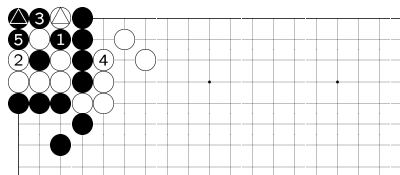
problem 265

⑪ at ⑦, ⑭ at ②, ⑱ at ⑫



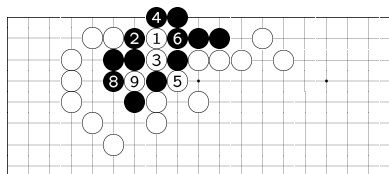
problem 270

⑧ at ④



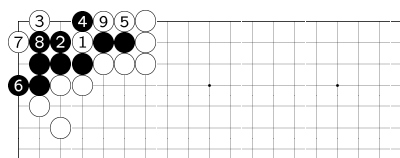
problem 266

⑥ at △, ⑦ at ⑤, ⑧ at △, ⑨ at ③

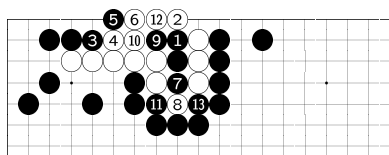


problem 271

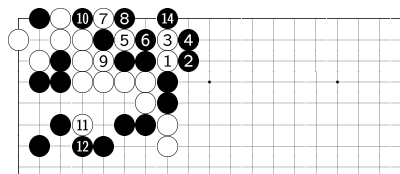
⑦ at ③



problem 272

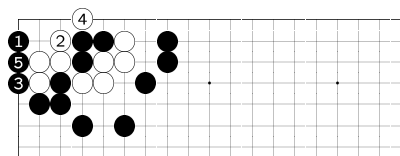


problem 273

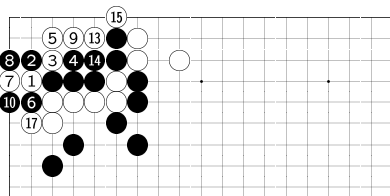


problem 274

⑬ at ⑦, ⑮ at ⑤

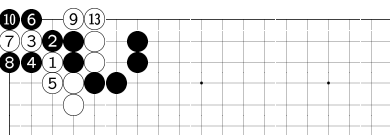


problem 275



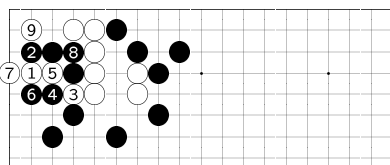
problem 276

⑪, ⑮ at ①, ⑫ at ⑦

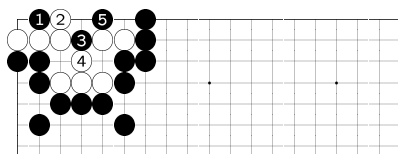


problem 277

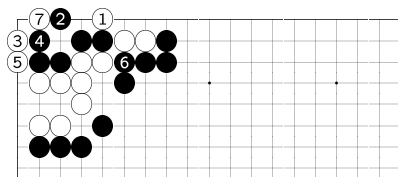
⑪ at ③, ⑫ at ⑦



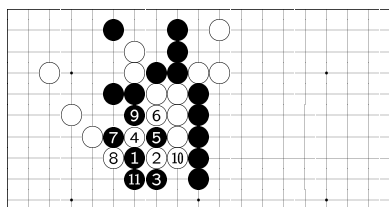
problem 278



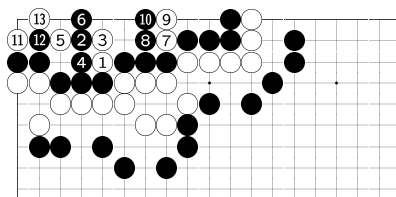
problem 279



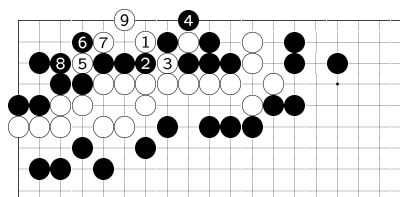
problem 280



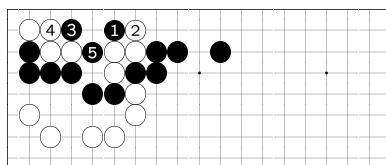
problem 281



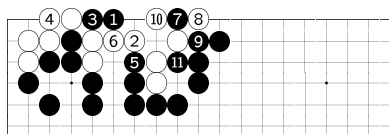
problem 285



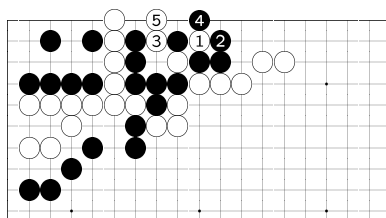
problem 282



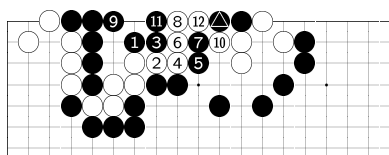
problem 286



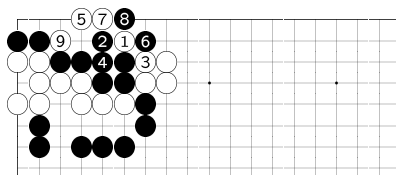
problem 283



problem 287



problem 284



problem 288

13 at ▲

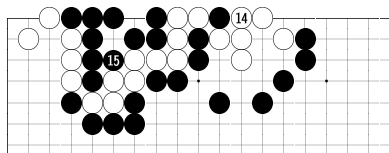
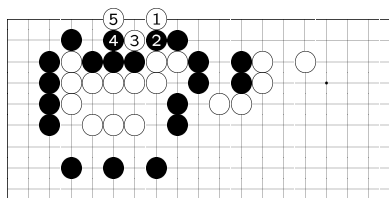
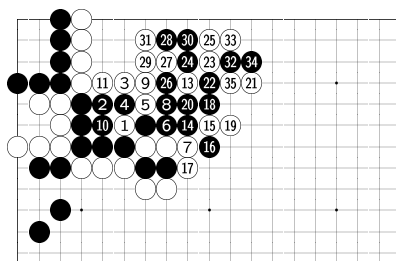


Diagram 2: 14-15

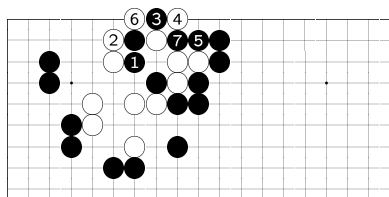


problem 289

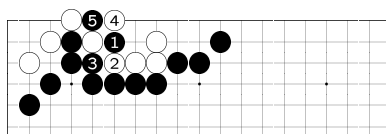


problem 293

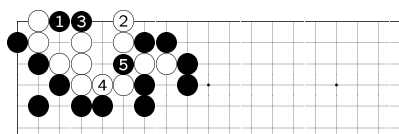
12 at 1



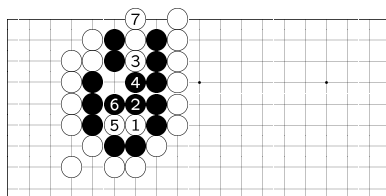
problem 290



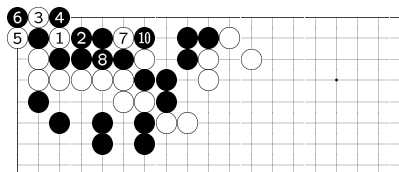
problem 294



problem 291

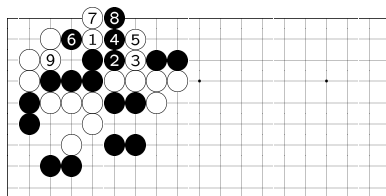


problem 295

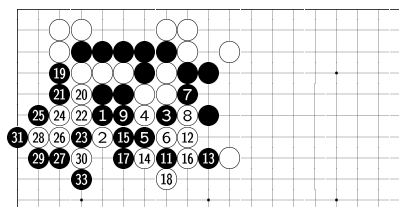


problem 292

9 at 3, 11 at 1

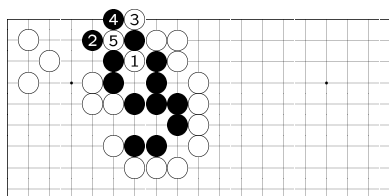


problem 296

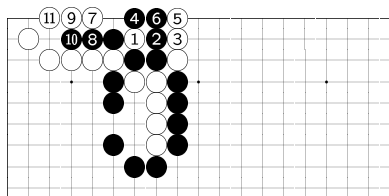


problem 297

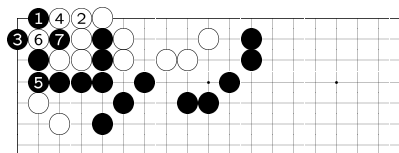
⑩ at ③, ⑫ at ⑮



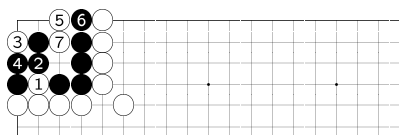
problem 298



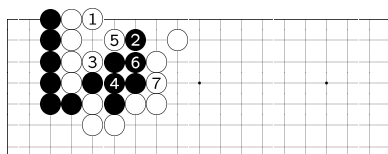
problem 299



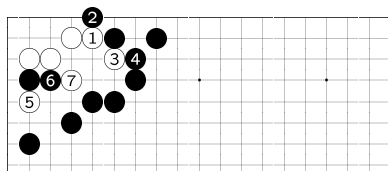
problem 300



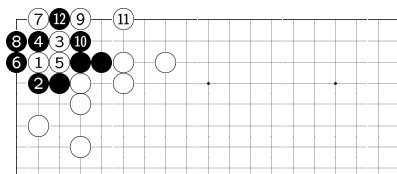
problem 301



problem 302

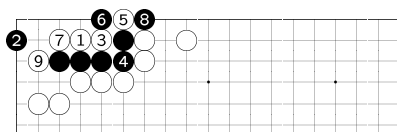


problem 303

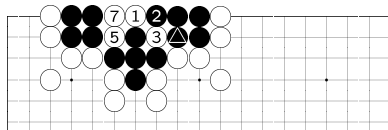


problem 304

⑬ at ③



problem 305



problem 306

④ at △, ⑥ at ②

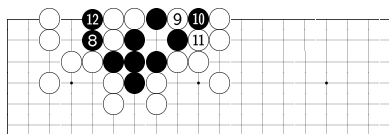
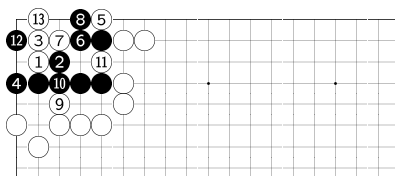
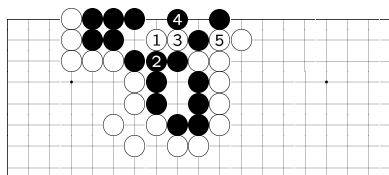


Diagram 2: 8-13

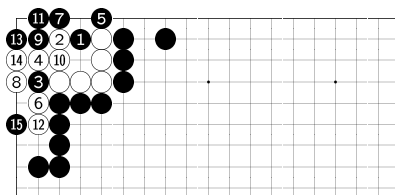
⑬ at ⑨



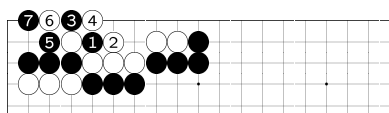
problem 310



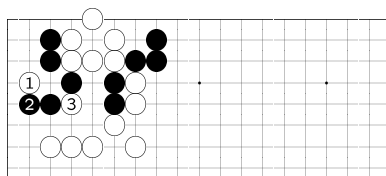
problem 307



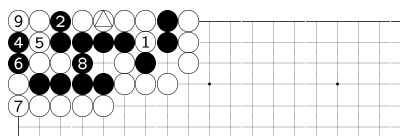
problem 311



problem 308

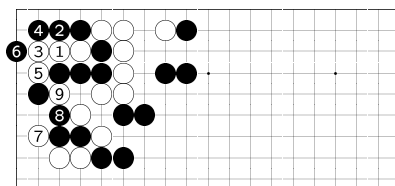


problem 312



problem 309

③ at △, ⑩, ⑫ at ⑥, ⑪ at ④



problem 313

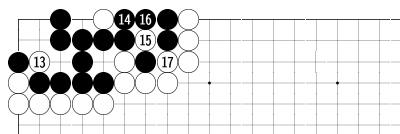
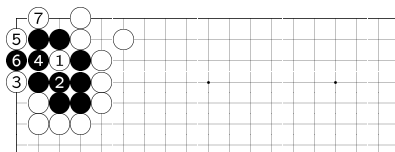
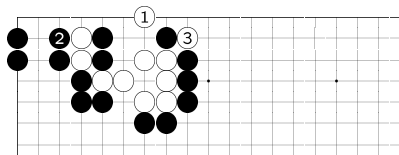


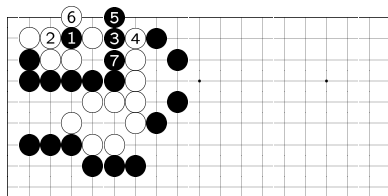
Diagram 2: 13-17



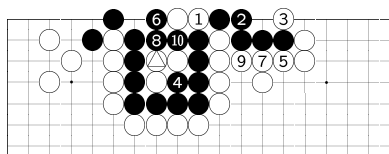
problem 314



problem 315

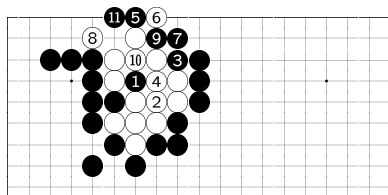


problem 320

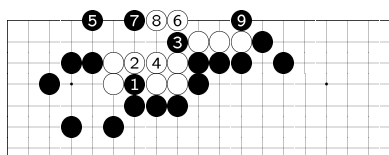


problem 316

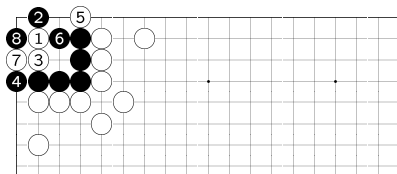
⑪ at ①, ⑫ at △



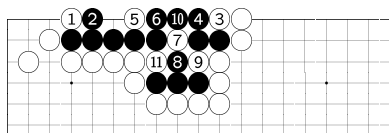
problem 321



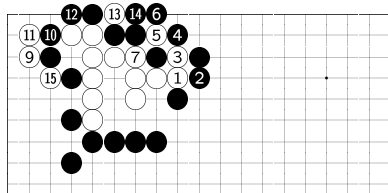
problem 317



problem 322

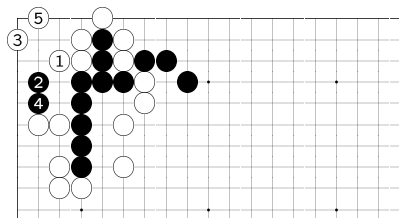


problem 318

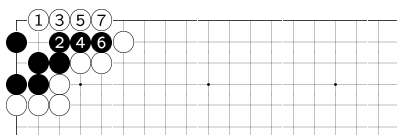


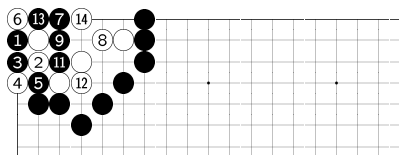
problem 323

⑧ at ⑤



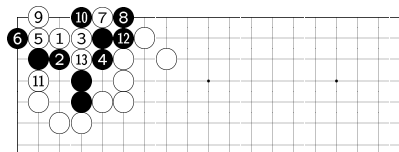
problem 319



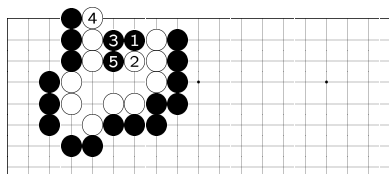


problem 325

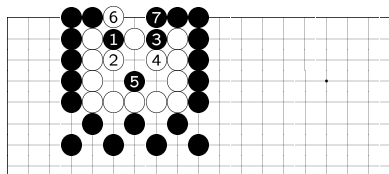
⑩ at ③, ⑮ at ①

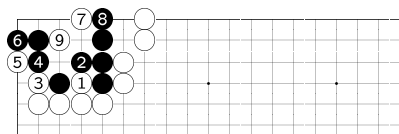


problem 326

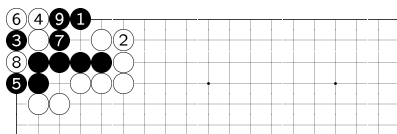


problem 327

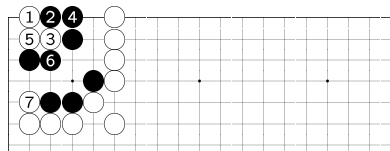




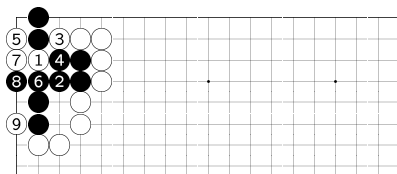
problem 335



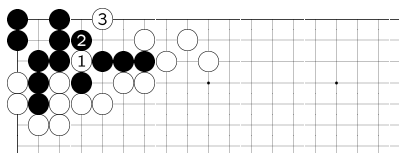
problem 341



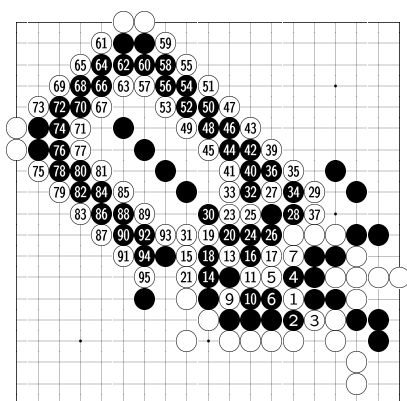
problem 336



problem 342

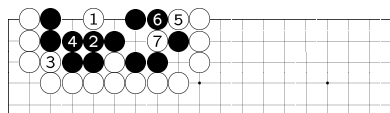


problem 337

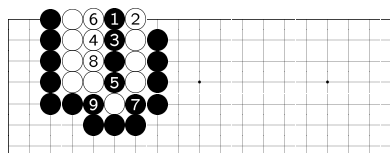


problem 343

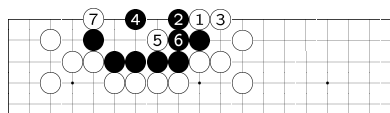
8 at 1, 12 at 9, 22 at 13, 38 at 27



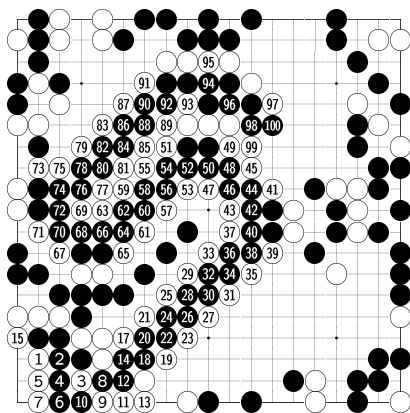
problem 338



problem 339



problem 340



problem 344

16 at ③

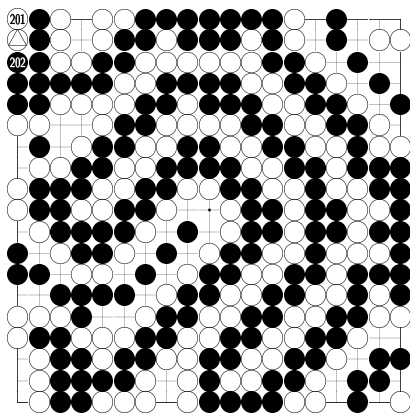


Diagram 3: 201-205

203, 205 at 201, 204 at ①

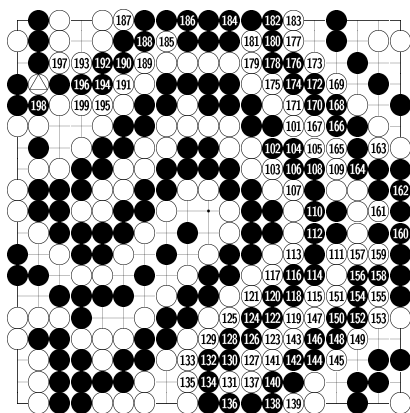
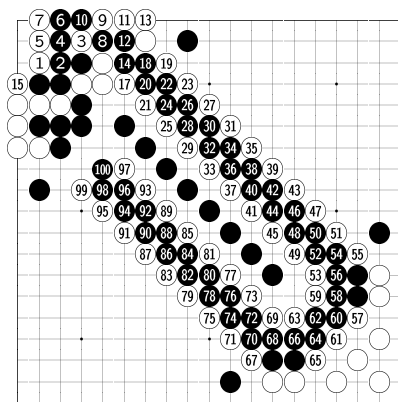


Diagram 2: 101-200

200 at ①



problem 345

16 at ③

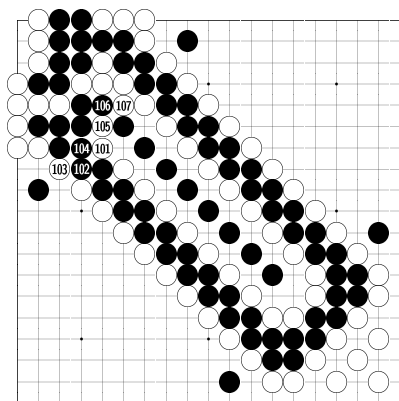


Diagram 2: 101-107

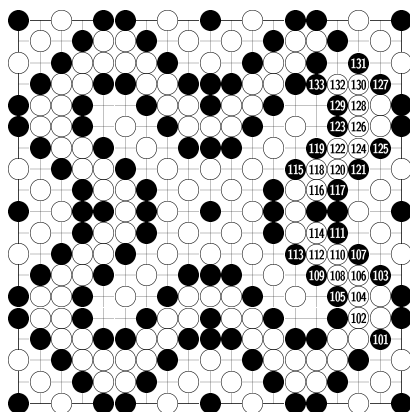
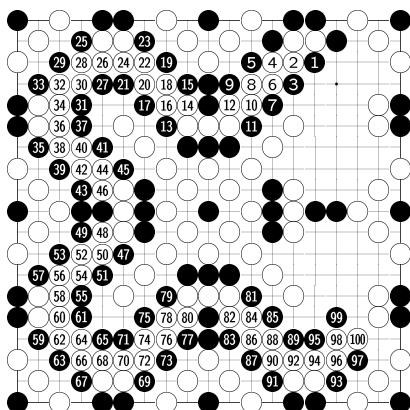
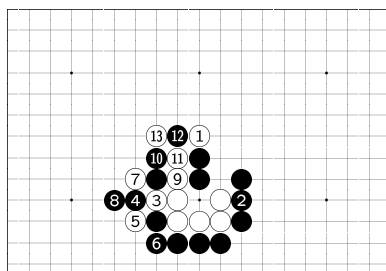


Diagram 2: 101-133



problem 346



problem 347