XG vs Colossus

249 backgammon positions where two engines disagree,
and keep disagreeing when each searches deeper

Eran Lambooij

XG vs Colossus
249 positions from 5,000 five-point matches between Colossus v2.0 and eXtreme Gammon 2.10

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Built on 3 November 2026. Every position, choice and figure in this book comes from the engines' own analysis; none is set by hand.

The positions as a public study: hedgehog-bg.com/s/disputed-positions

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Introduction

Colossus is the frontier model of the HedgeHog engine: the newest and strongest of the neural networks behind HedgeHog's analysis. Version 2.0, the network in this book, heads HedgeHog's head-to-head benchmark table, and its lead over eXtreme Gammon holds at every depth it has been measured, from the bare networks to the full search and from money play to the match these positions come from:

Against eXtreme Gammon	Games	Colossus 2.0	95% interval
0-ply, the networks alone, cubeful money	10,000,000	+0.050 a game	+0.048 to +0.052
2-ply, XG 2.10, cubeful money, after luck	20,000	+0.033 a game	+0.023 to +0.042
2-ply, XG 2.10, 5-point matches, after luck	5,000 matches	50.68% of matches	50.44% to 50.93%

Colossus played as HedgeHog plays, through the same decision code that analyses players' own matches, so each of its choices here is the one HedgeHog would show.

Both engines played at 2-ply, and each engine's decisions were screened by the other: XG at 2-ply called 649 of Colossus's decisions an error of 0.08 or more, and Colossus at 2-ply called 714 of XG's.

A position is in this book only when the judging engine still prefers another choice by at least 0.02 at 3-ply and at 4-ply, and the engine that played still prefers its own choice at 3-ply and at 4-ply. These are differences of opinion, not mistakes one engine abandons at depth.

The 249 positions are grouped by theme, from the middle game through priming battles and back games to the bear-off and the gammon save, and within each chapter checker plays come before cube actions.

These positions have been compiled into a HedgeHog public study: hedgehog-bg.com/s/disputed-positions.

How to read the problems

The diagram

Each diagram is the position as it was played, at its match score and cube, all in 5-point matches. Colossus played White and XG Black. The side to decide is always drawn at the bottom, and the question under the diagram names it.

The score

Scores are given away, White's first: 3A5A means White needs 3 points and Black needs 5. A trailing C marks the Crawford game (2A1AC).

Cube actions

ND is no double, DT double and take, DP double and pass, and TG too good to double. A take decision shows the cube already offered, and its two choices are DT and DP.

The two choices

One of (a) and (b) is Colossus's choice and the other is XG's. The letter does not say which: checker plays are ordered by the position itself, cube actions in their natural order, ND before DT before DP.

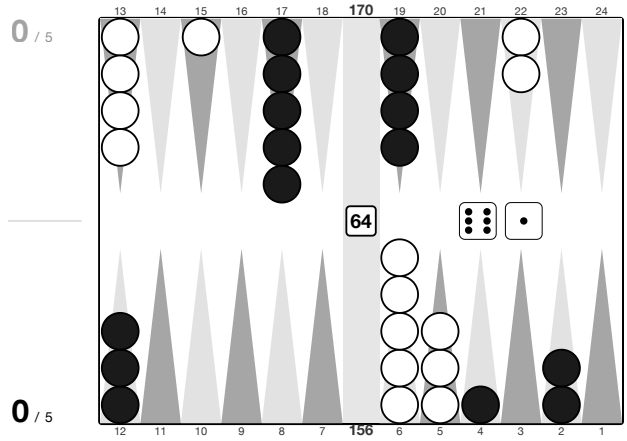
The answer key

For each problem the key at the back, where Colossus is written HH for HedgeHog, names the engine that played and the choice it made, and gives each engine's preference for its own choice: how much better, in equity, it rates its own choice than the other engine's, at 2-, 3- and 4-ply. Both are positive at every depth in every problem, with three exceptions: in three of XG's cube actions, XG at 2-ply, the depth it played at, rates the two actions level.

A figure in italics belongs to a play XG pruned during its normal search: XG's move list did not carry the play to that depth, so it was valued on its own at that depth, the way XG values a candidate.

Depths are in XG's counting. Equities are EMG.

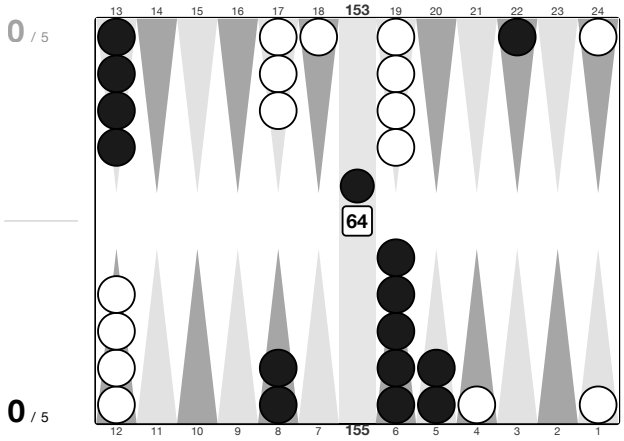
1



5A5A: White to play 61

(a) 22/15 **(b)** 15/9 5/4*

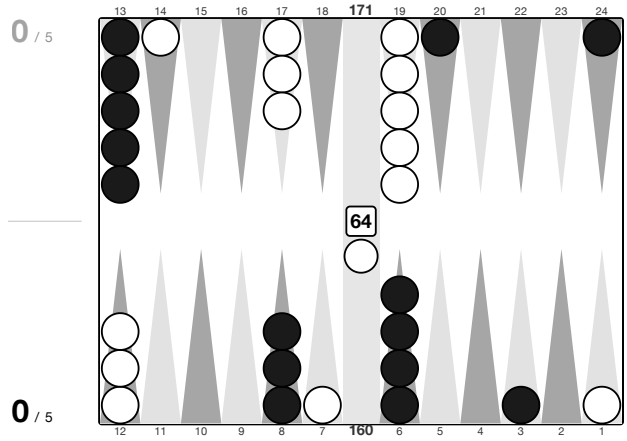
2



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

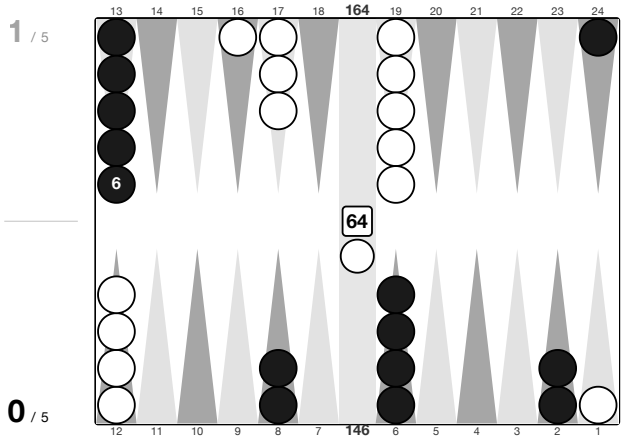
3



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

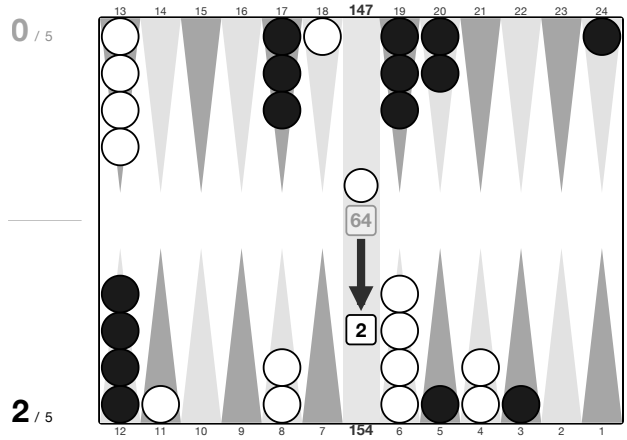
4



4A5A: Black on roll. Cube action?

(a) ND **(b)** DT

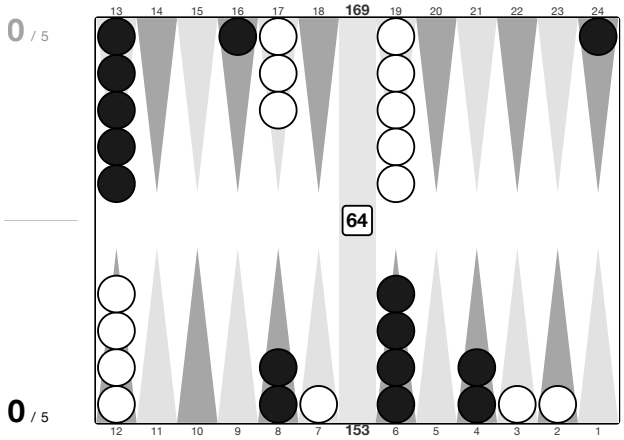
5



3A5A: Black doubles to 2. Take or pass?

(a) DT **(b)** DP

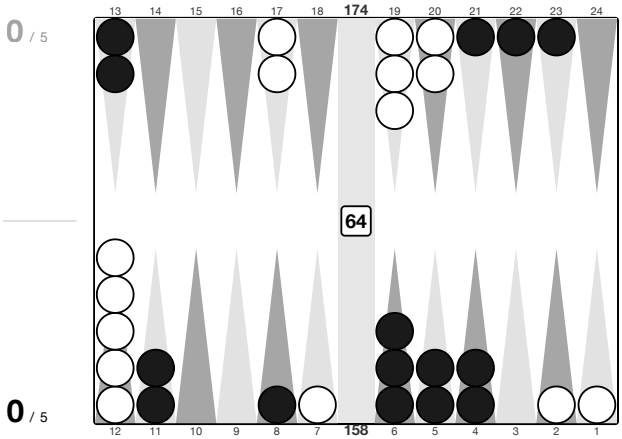
6



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

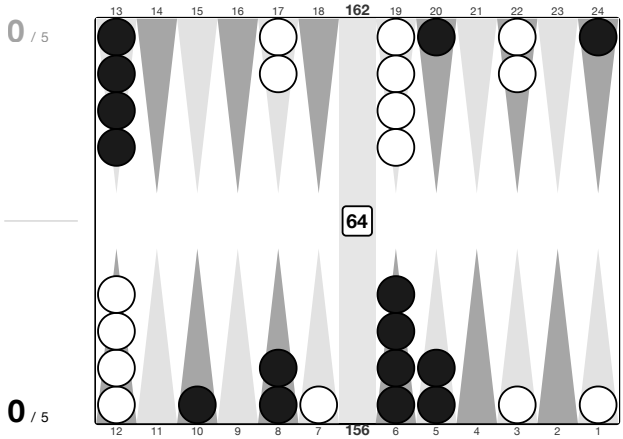
7



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

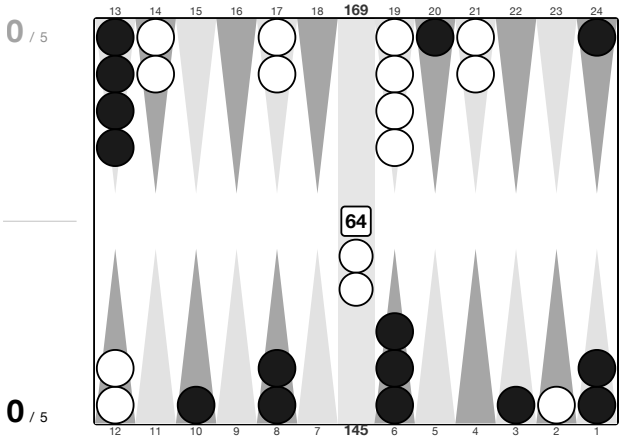
8



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

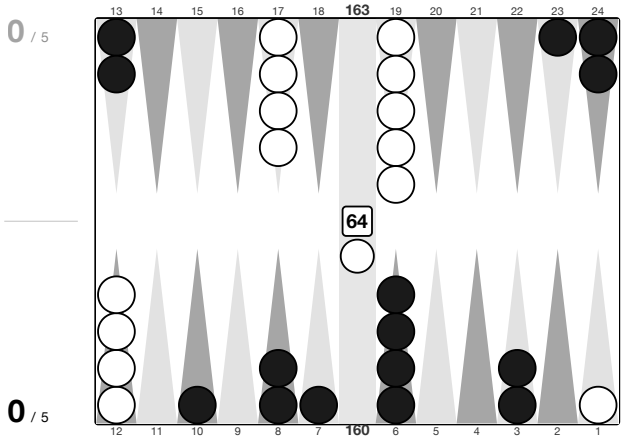
9



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

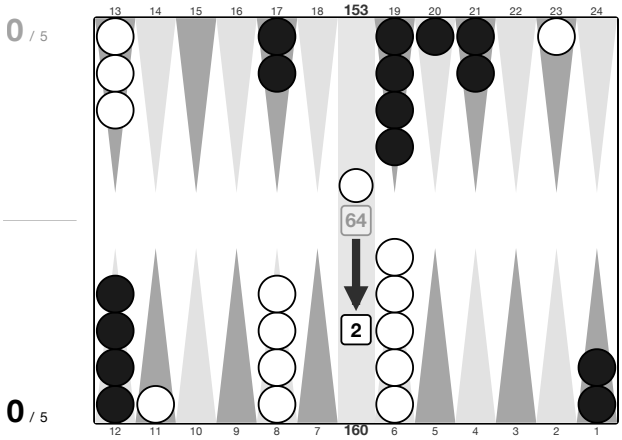
10



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

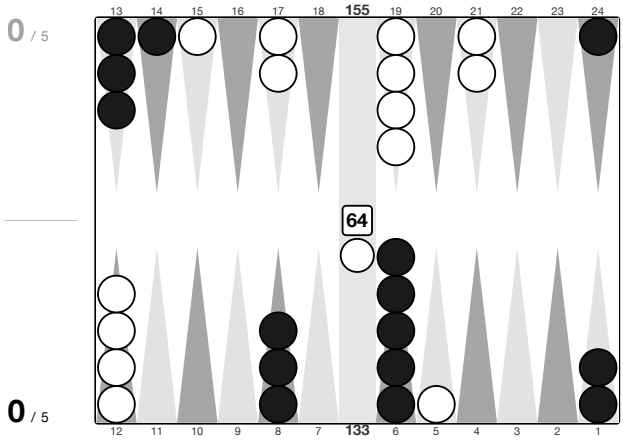
11



5A5A: Black doubles to 2. Take or pass?

(a) DT **(b)** DP

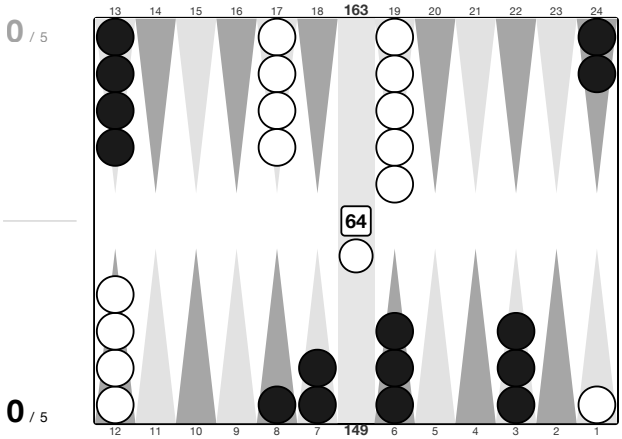
12



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

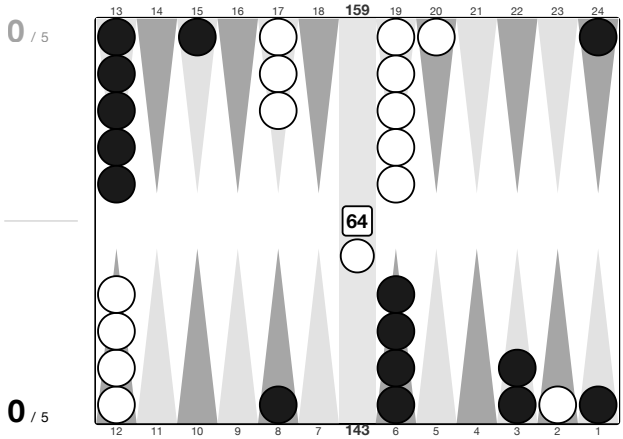
13



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

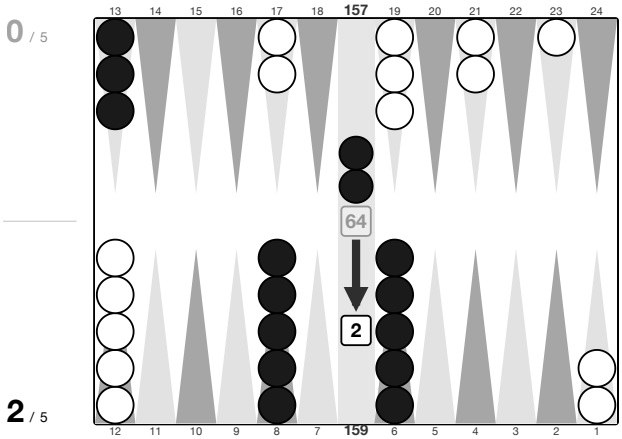
14



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

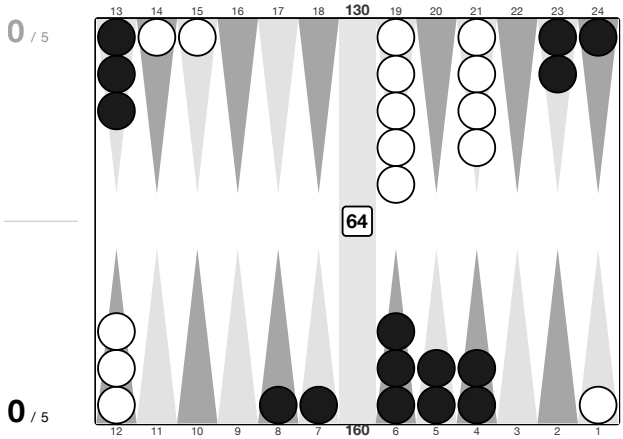
15



5A3A: White doubles to 2. Take or pass?

(a) DT **(b)** DP

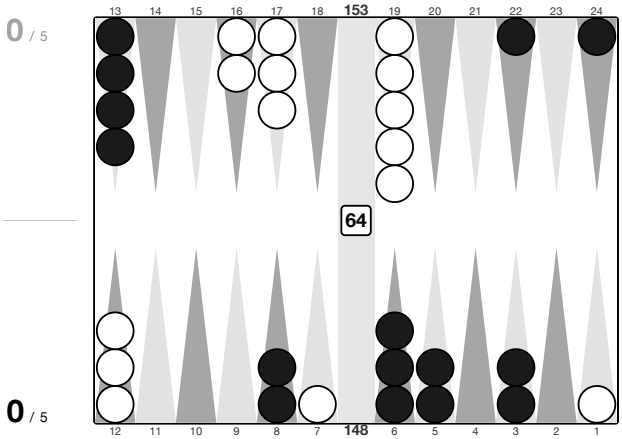
16



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

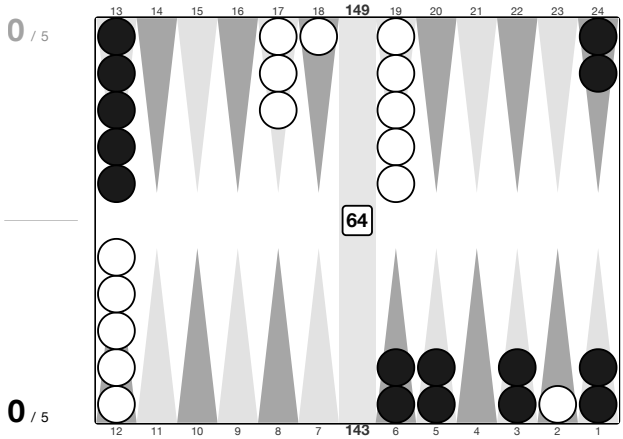
17



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

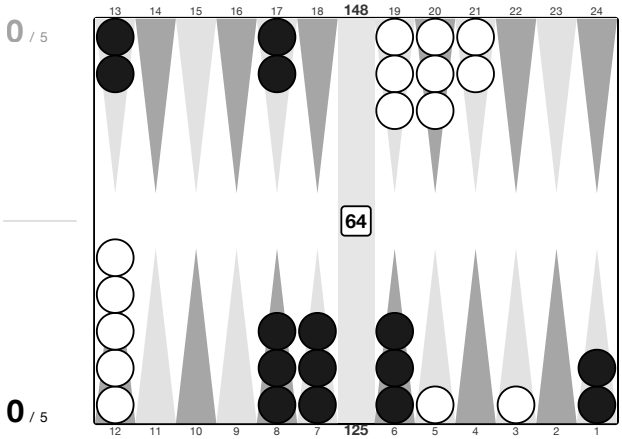
18



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

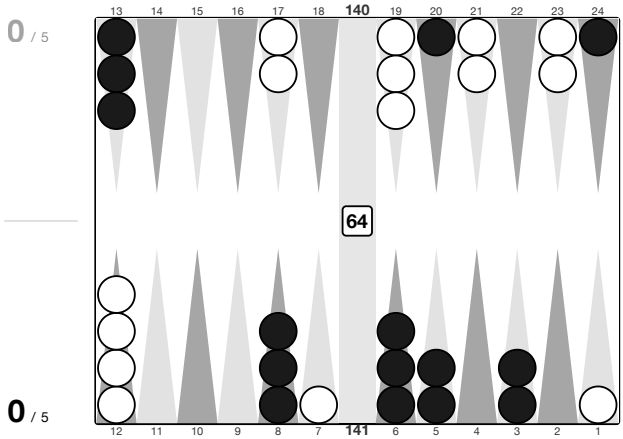
19



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

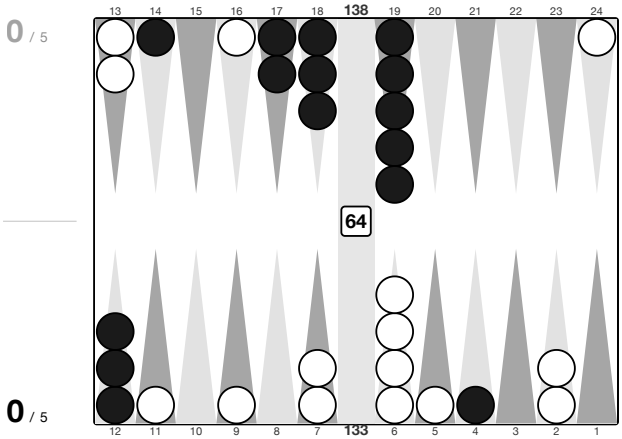
20



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

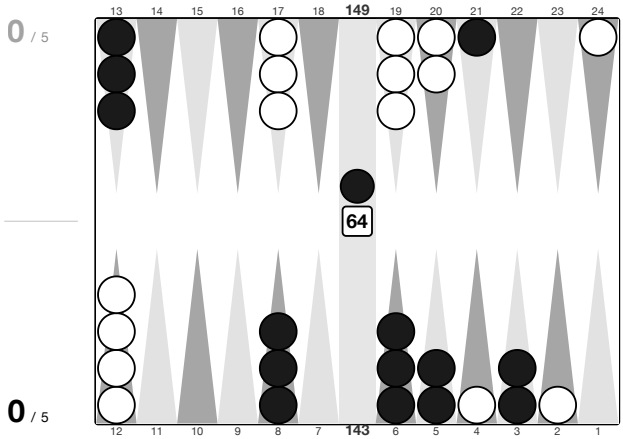
21



5A5A: White on roll. Cube action?

(a) ND **(b)** DT

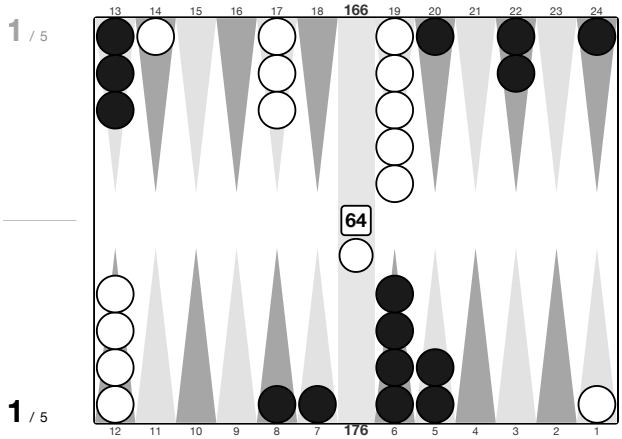
22



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

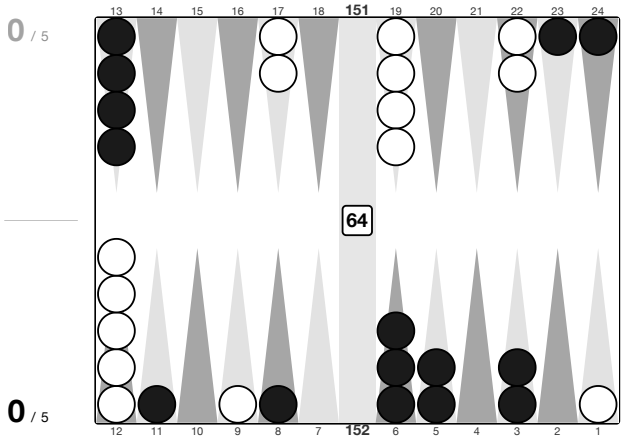
23



4A4A: Black on roll. Cube action?

(a) ND **(b)** DT

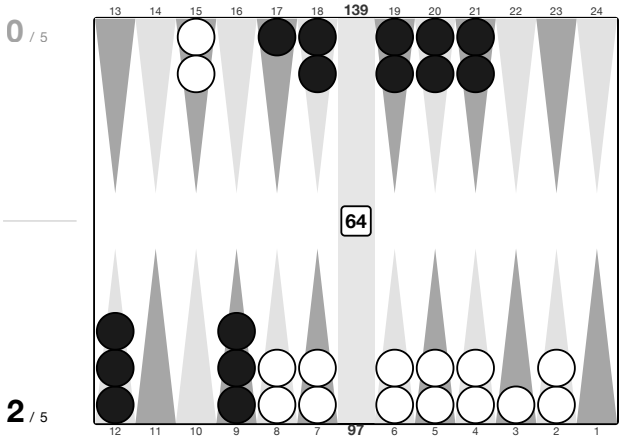
24



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

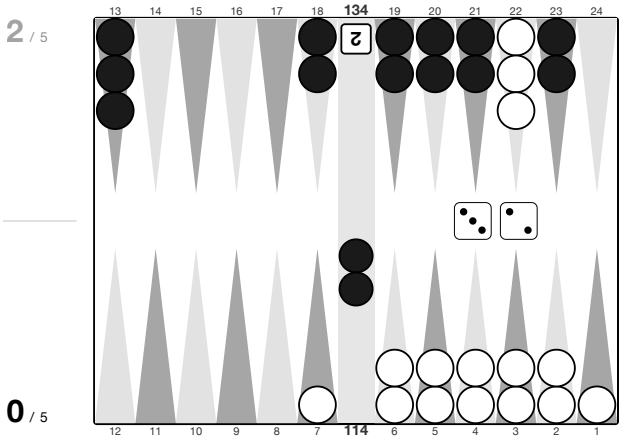
25



3A5A: White on roll. Cube action?

(a) ND **(b)** DT

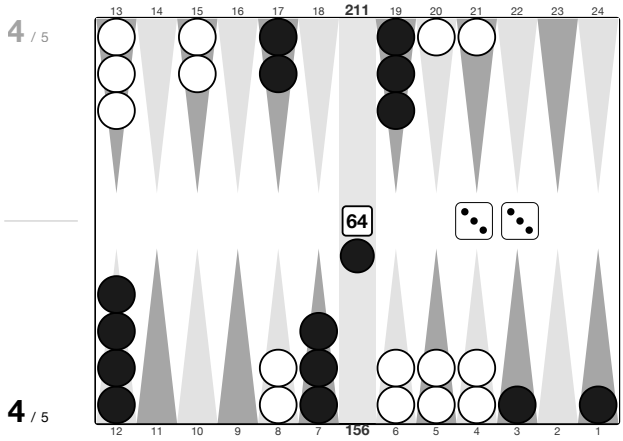
26



5A3A: White to play 32

(a) 6/1 **(b)** 7/2

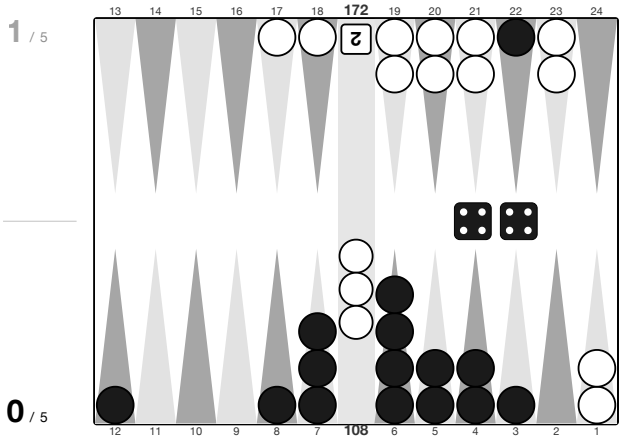
27



1A1A: White to play 33

(a) 6/3*(2) 4/1*(2) **(b)** 21/18 13/10(3)

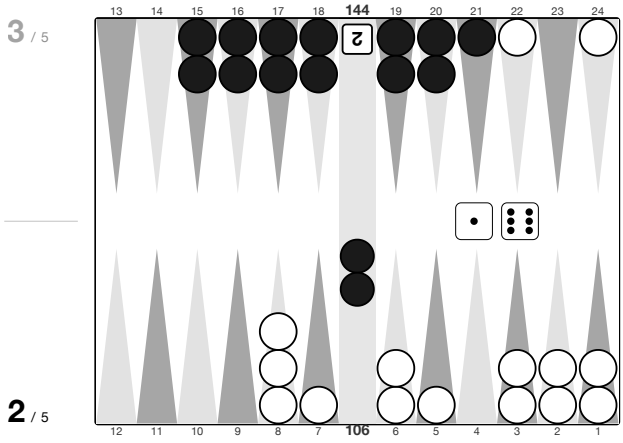
28



4A5A: Black to play 44

(a) 22/18* 7/3 6/2(2) **(b)** 22/18* 12/8 7/3 6/2

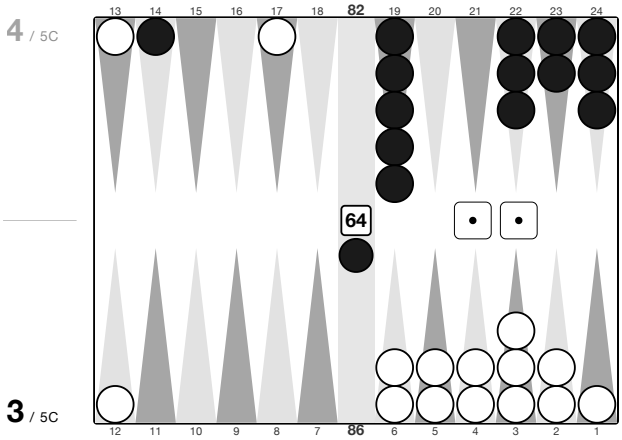
29



3A2A: White to play 61

(a) 8/2 6/5 **(b)** 22/21* 7/1

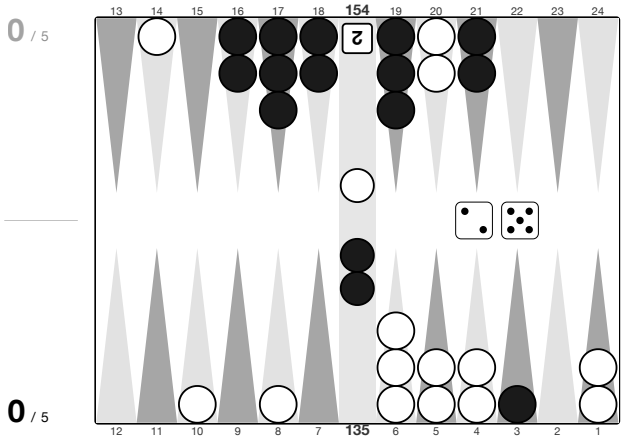
30



2A1AC: White to play 11

(a) 17/14* 12/11 **(b)** 13/11 3/1

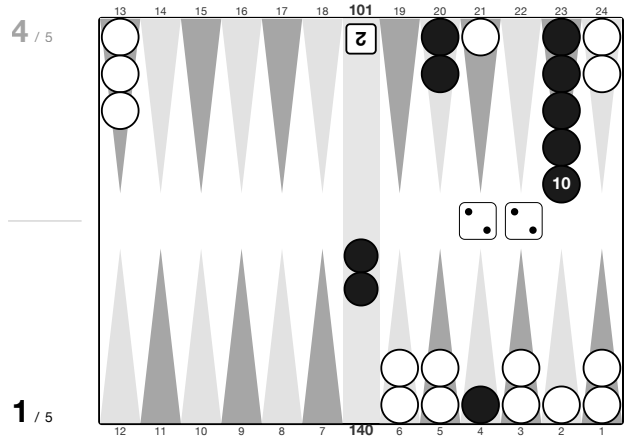
31



5A5A: White to play 52

(a) bar/20 10/8 **(b)** bar/23 8/3*

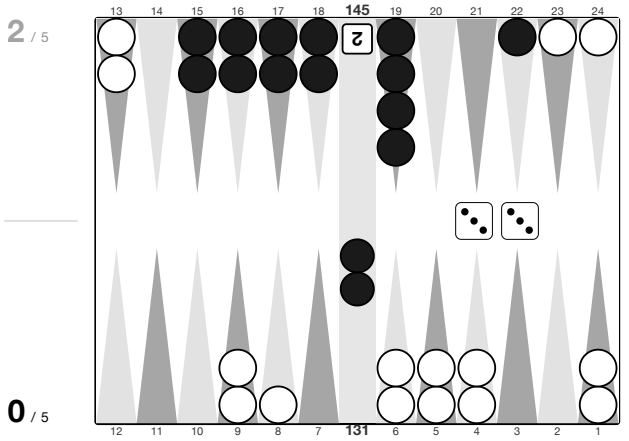
32



4A1A: White to play 22

(a) 24/22 13/11 6/4*(2) **(b)** 13/11(2) 6/4*/2

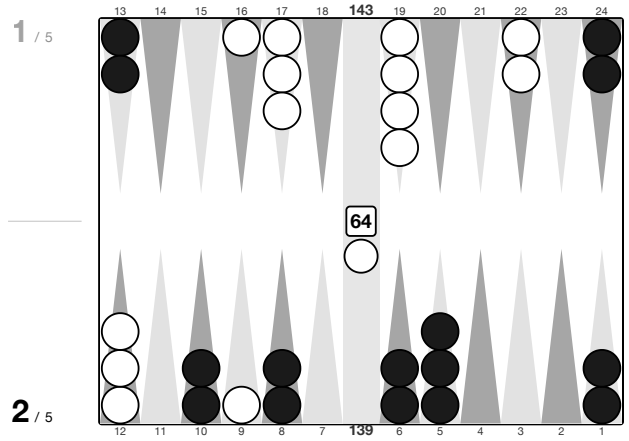
33



5A3A: White to play 33

(a) 23/20 13/7 9/6 **(b)** 9/3(2)

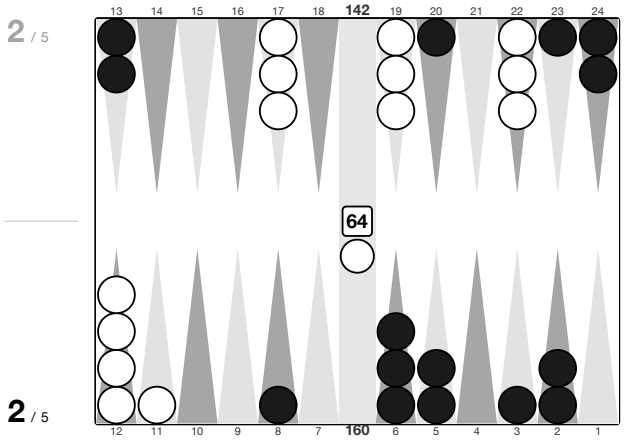
34



4A3A: Black on roll. Cube action?

(a) DP **(b)** TG

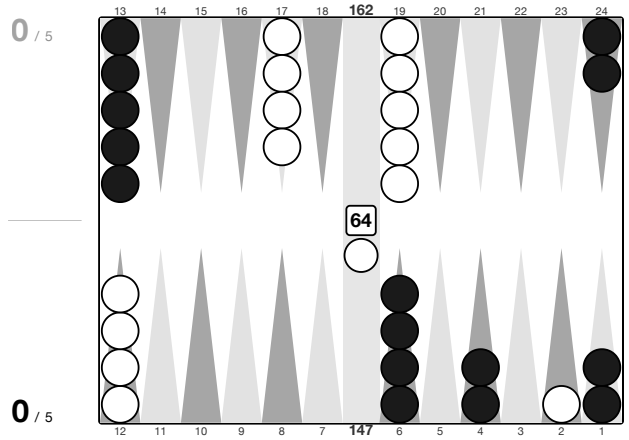
35



3A3A: Black on roll. Cube action?

(a) ND **(b)** DT

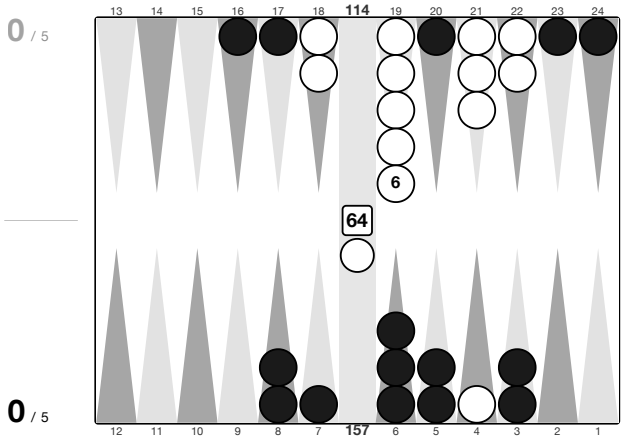
36



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

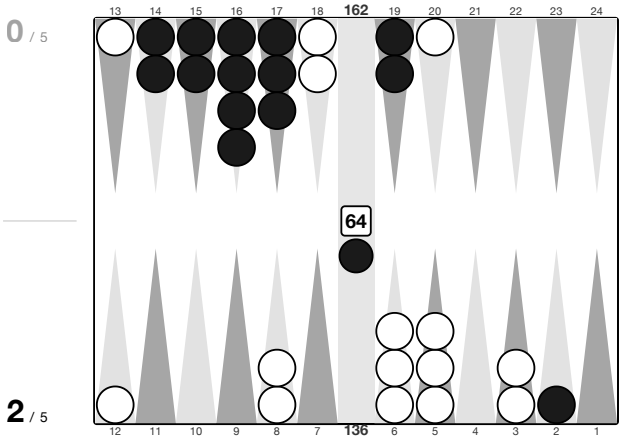
37



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

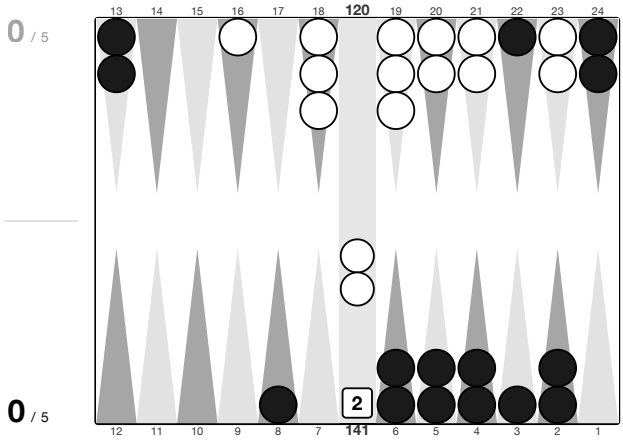
38



3A5A: White on roll. Cube action?

(a) ND **(b)** DT

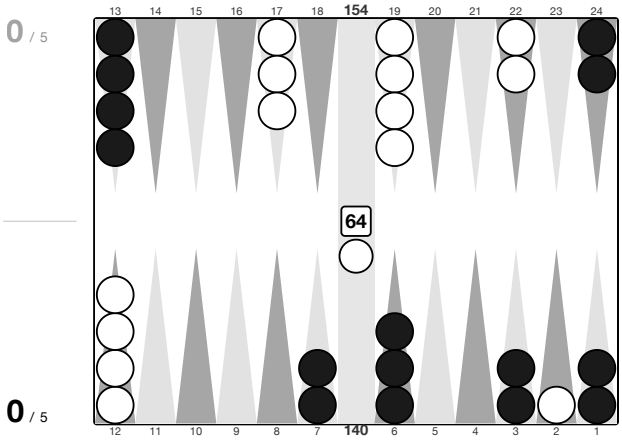
39



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

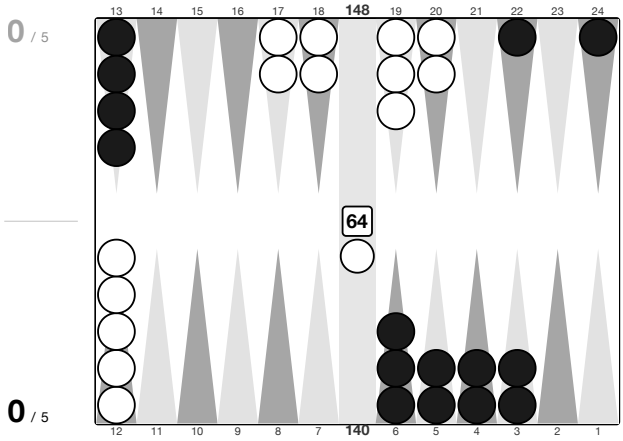
40



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

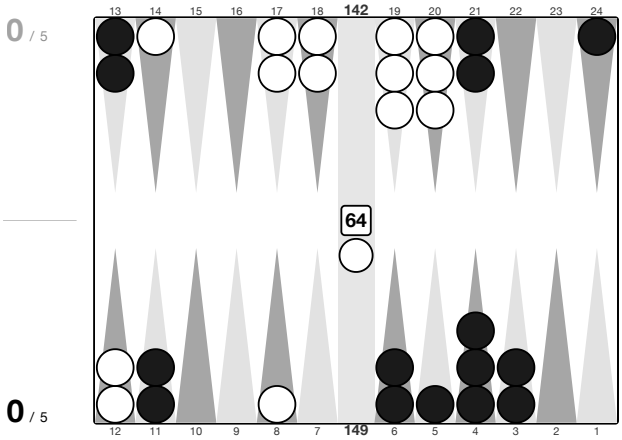
41



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

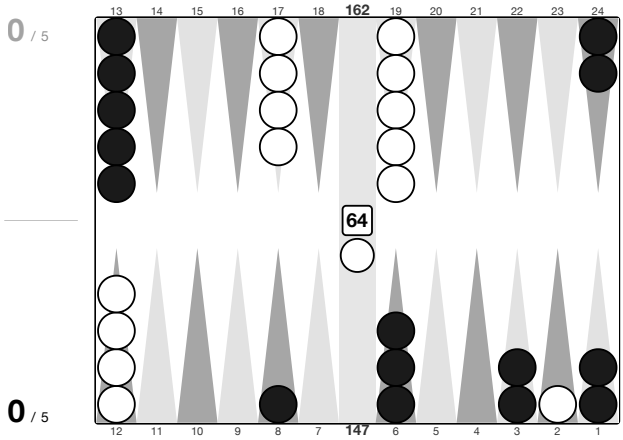
42



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

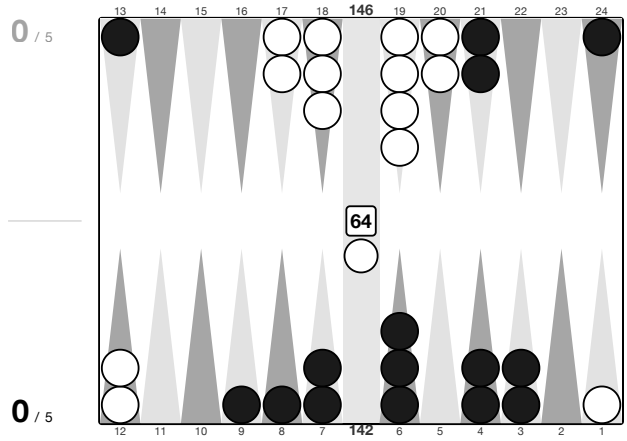
43



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

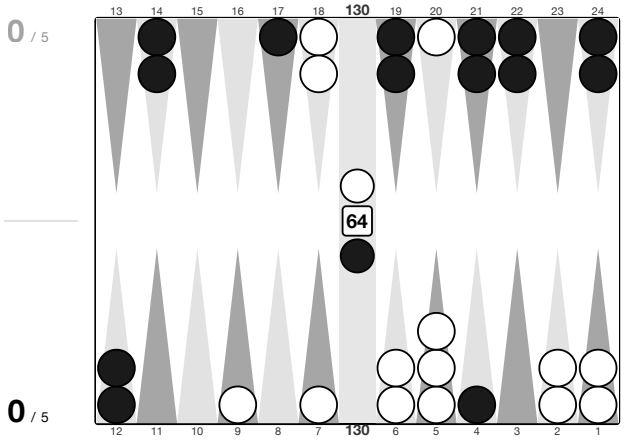
44



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

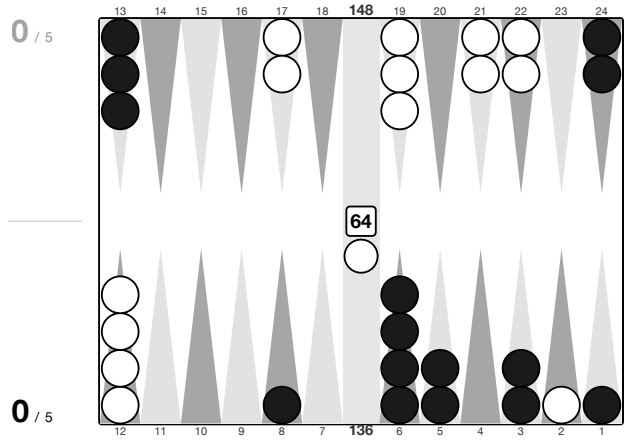
45



5A5A: White on roll. Cube action?

(a) ND **(b)** DT

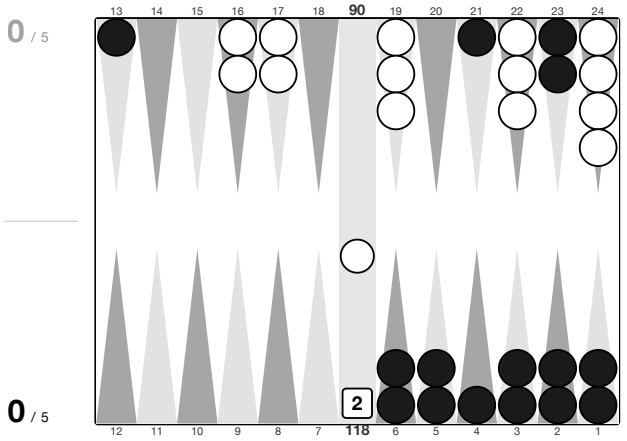
46



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

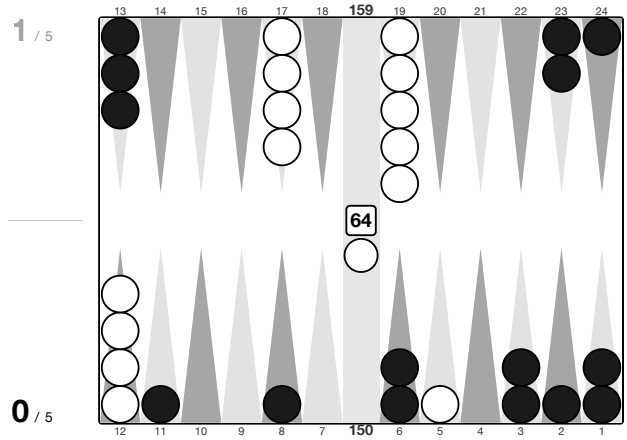
47



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

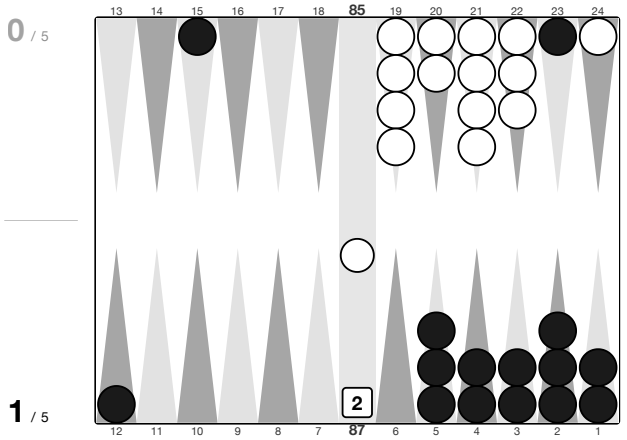
48



4A5A: Black on roll. Cube action?

(a) ND **(b)** DT

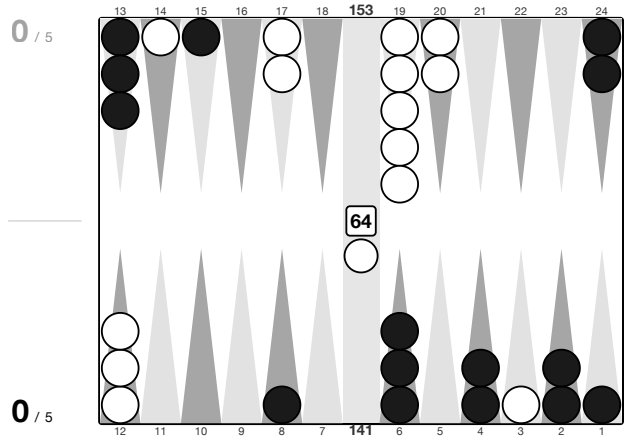
49



5A4A: Black on roll. Cube action?

(a) ND **(b)** DT

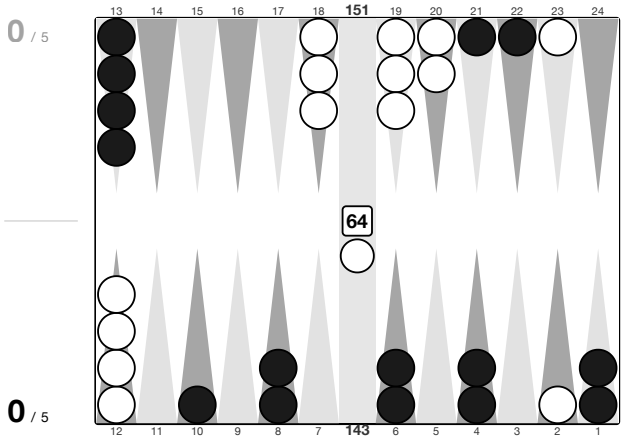
50



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

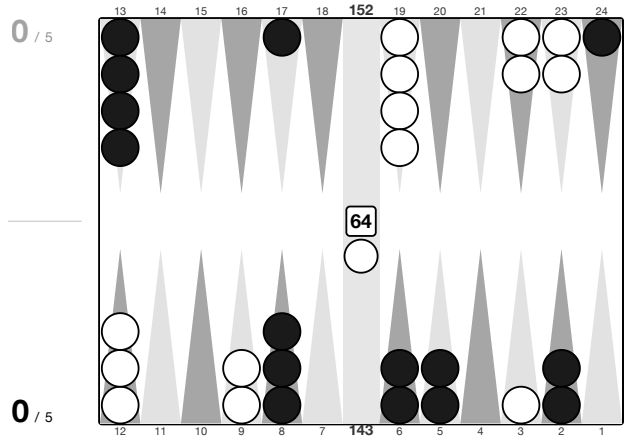
51



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

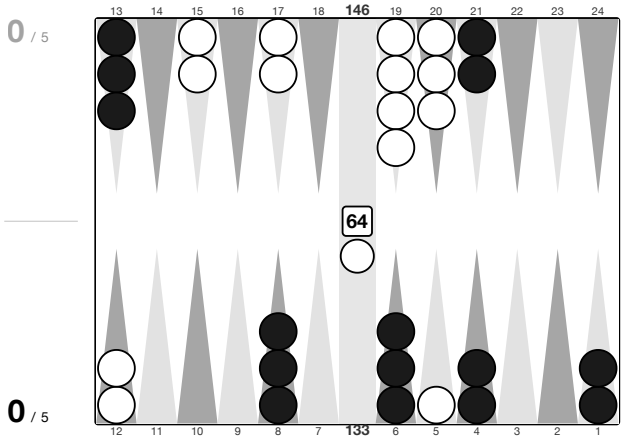
52



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

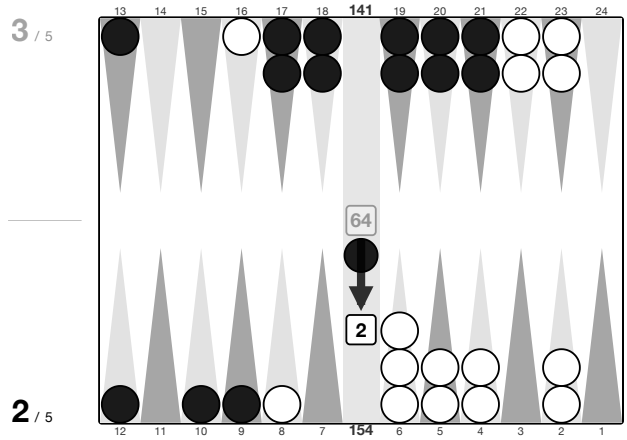
53



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

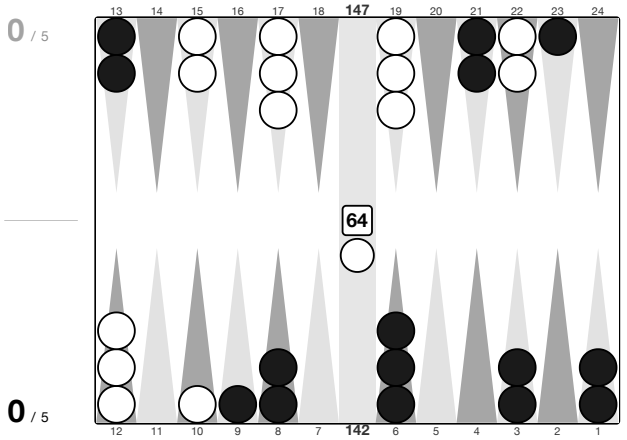
54



3A2A: Black doubles to 2. Take or pass?

(a) DT **(b)** DP

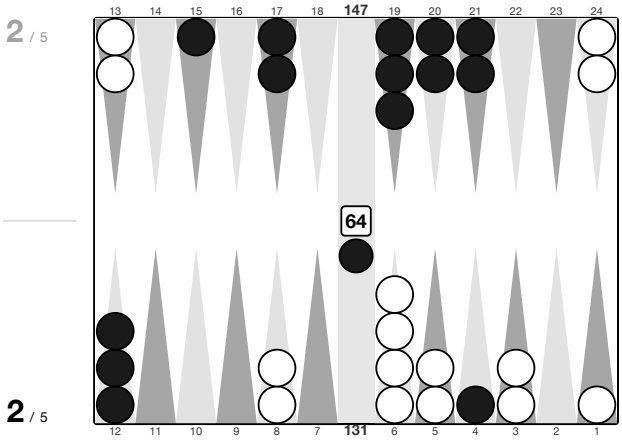
55



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

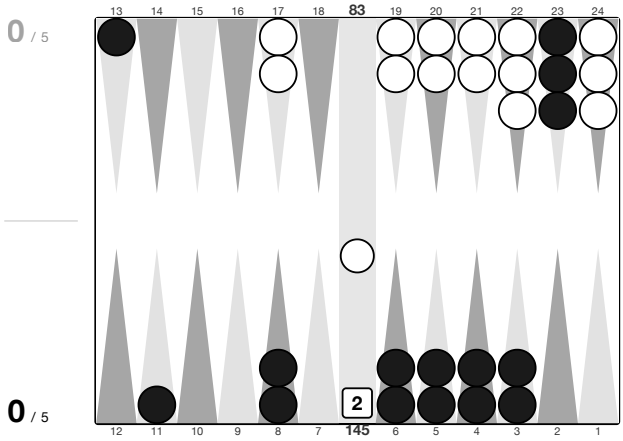
56



3A3A: White on roll. Cube action?

(a) ND **(b)** DT

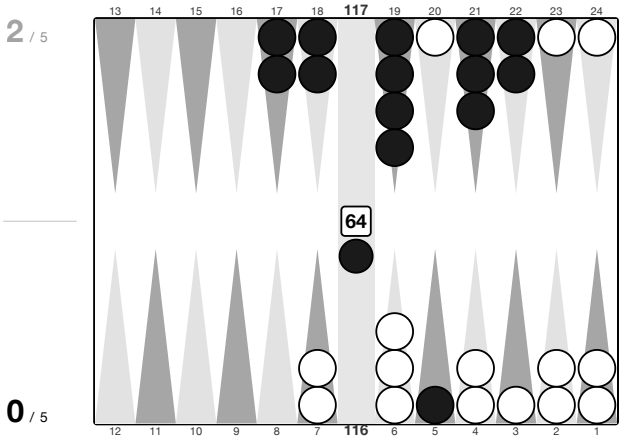
57



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

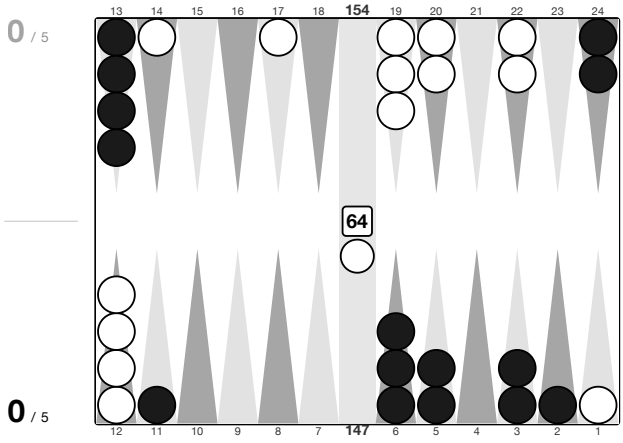
58



5A3A: White on roll. Cube action?

(a) ND **(b)** DT

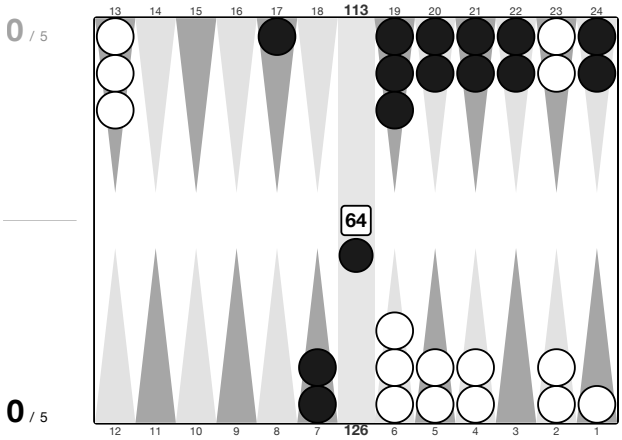
59



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

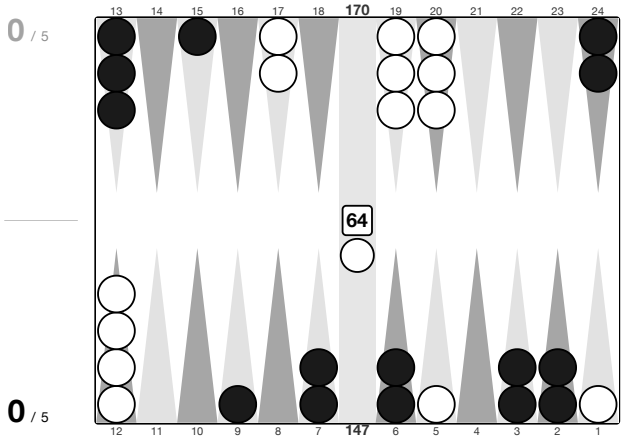
60



5A5A: White on roll. Cube action?

(a) ND **(b)** DT

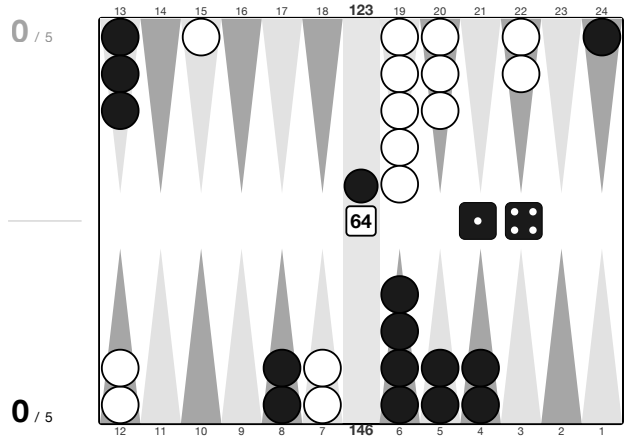
61



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

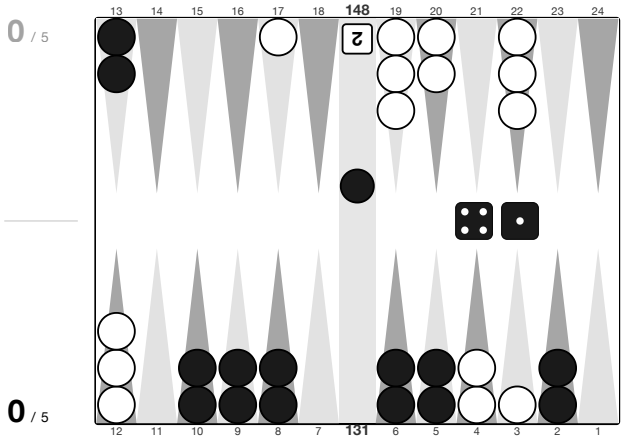
62



5A5A: Black to play 41

(a) bar/24 6/2 **(b)** bar/21 24/23

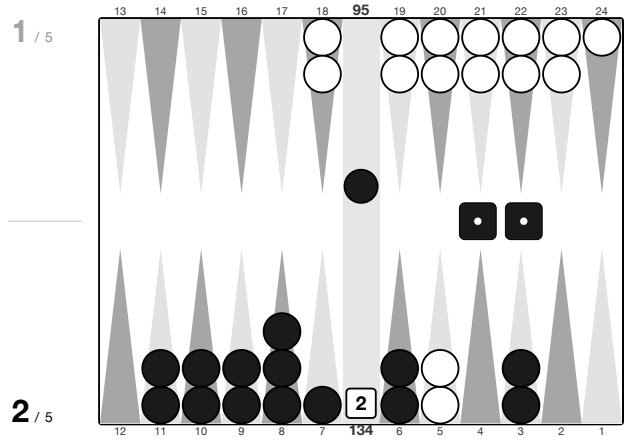
63



5A5A: Black to play 41

(a) bar/21 2/1 **(b)** bar/24 13/9

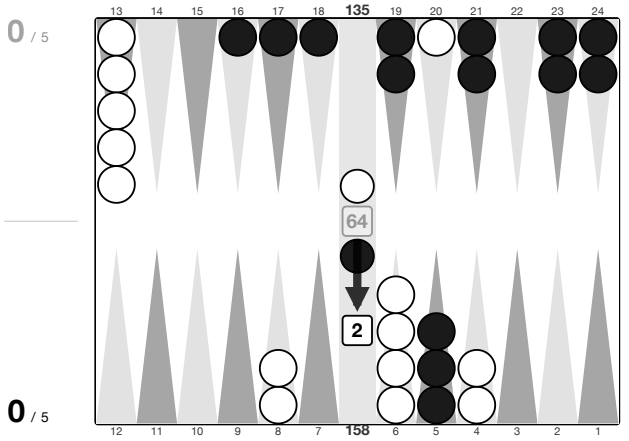
64



4A3A: Black to play 11

(a) bar/24* 8/7 3/2(2) **(b)** bar/24* 8/7 3/1

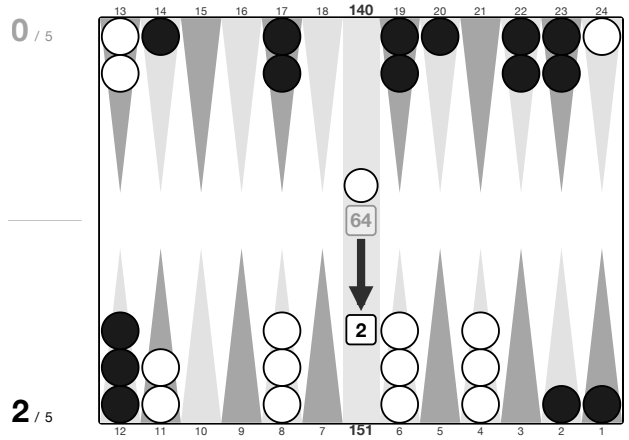
65



5A5A: Black doubles to 2. Take or pass?

(a) DT **(b)** DP

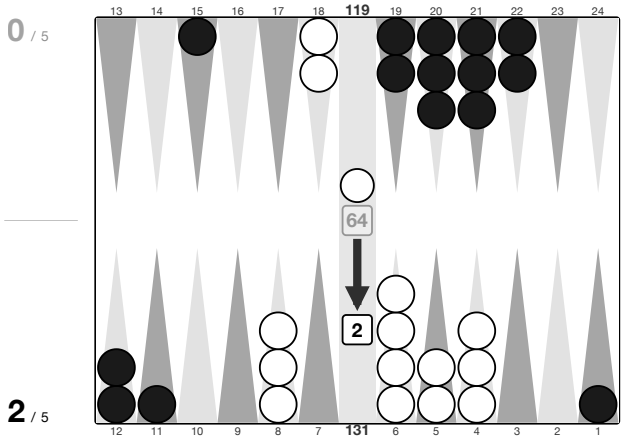
66



3A5A: Black doubles to 2. Take or pass?

(a) DT **(b)** DP

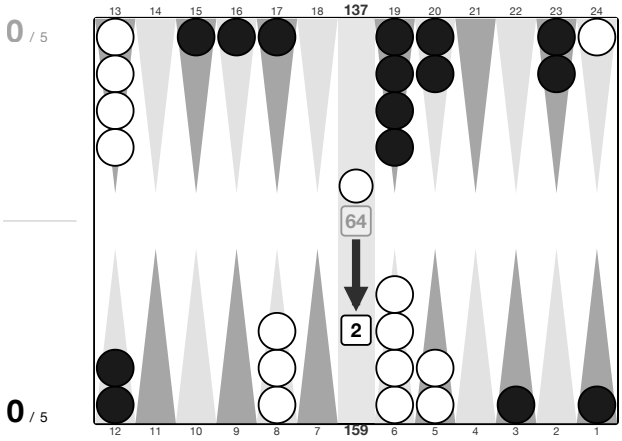
67



3A5A: Black doubles to 2. Take or pass?

(a) DT **(b)** DP

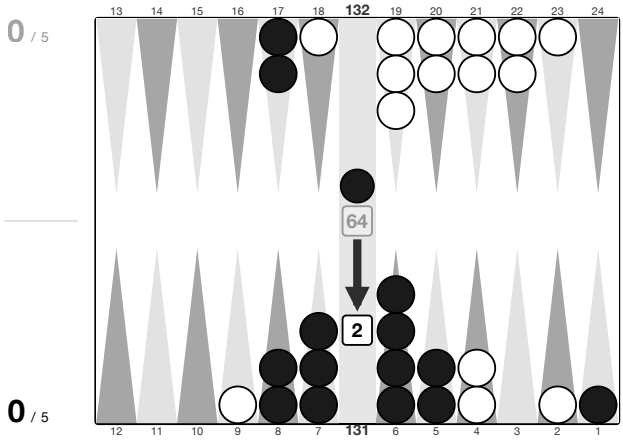
68



5A5A: Black doubles to 2. Take or pass?

(a) DT **(b)** DP

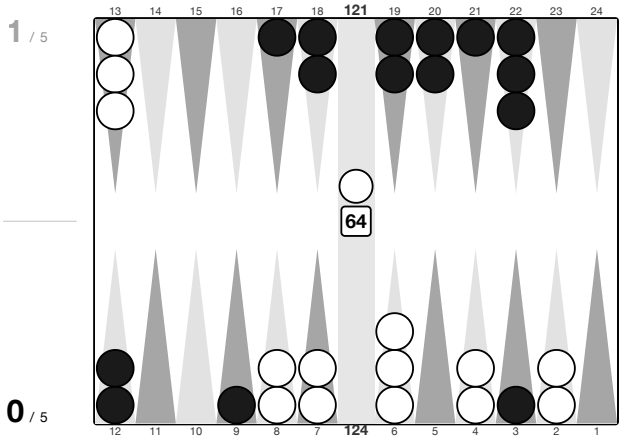
69



5A5A: White doubles to 2. Take or pass?

(a) DT **(b)** DP

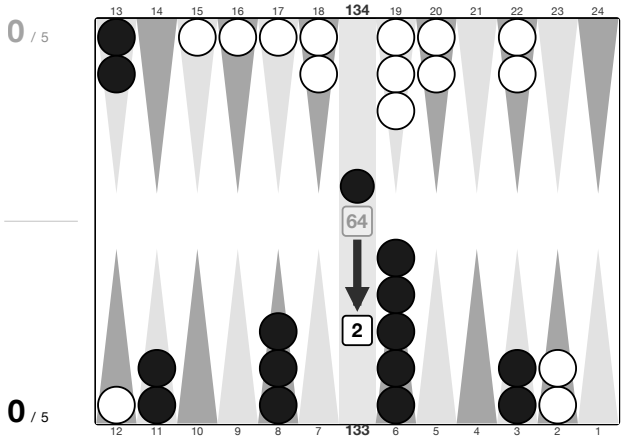
70



5A4A: White on roll. Cube action?

(a) ND **(b)** DT

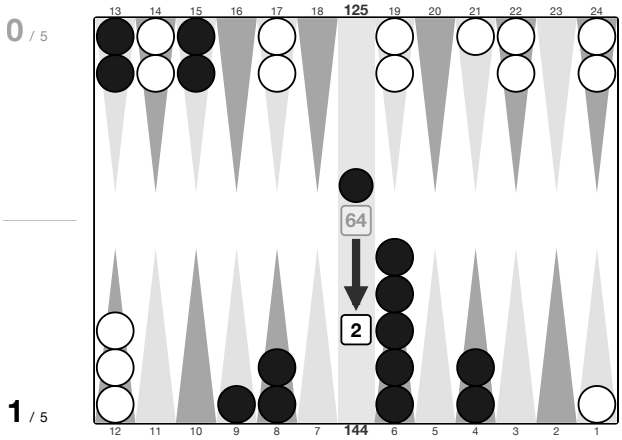
71



5A5A: White doubles to 2. Take or pass?

(a) DT **(b)** DP

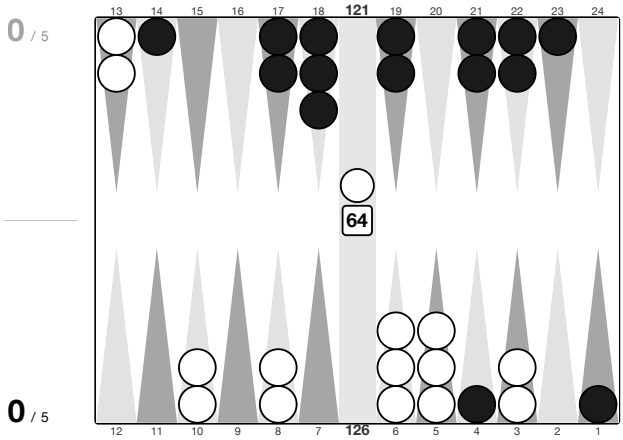
72



5A4A: White doubles to 2. Take or pass?

(a) DT **(b)** DP

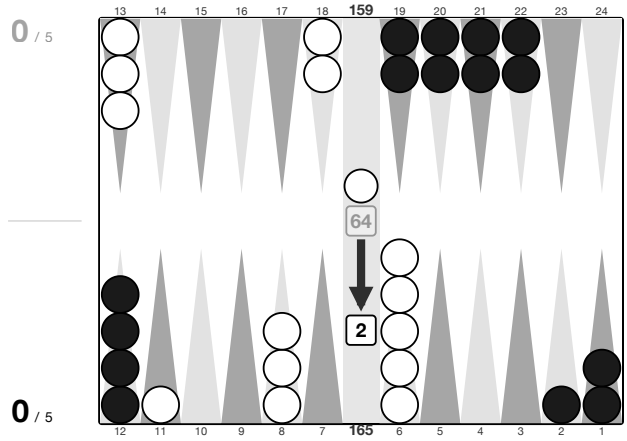
73



5A5A: White on roll. Cube action?

(a) ND **(b)** DT

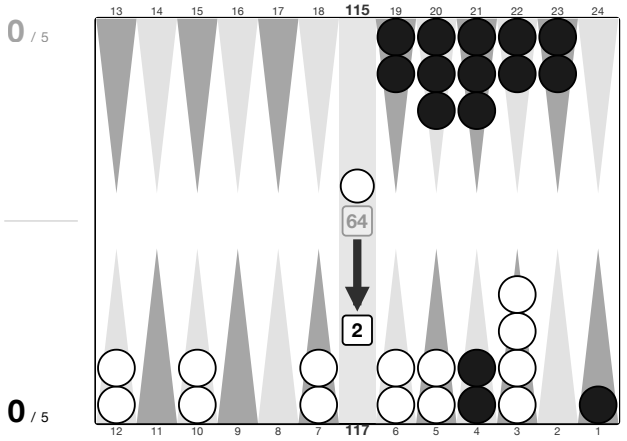
74



5A5A: Black doubles to 2. Take or pass?

(a) DT **(b)** DP

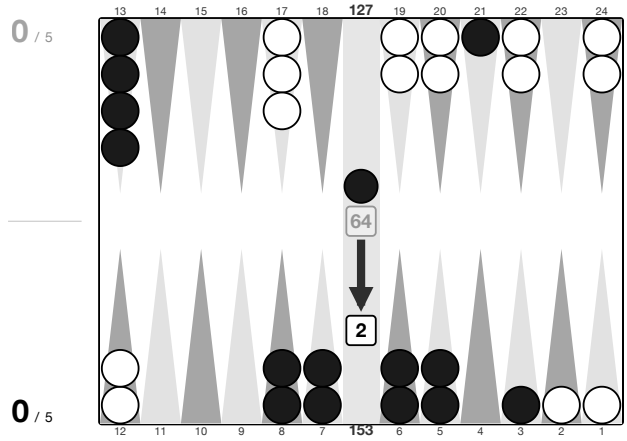
75



5A5A: Black doubles to 2. Take or pass?

(a) DT **(b)** DP

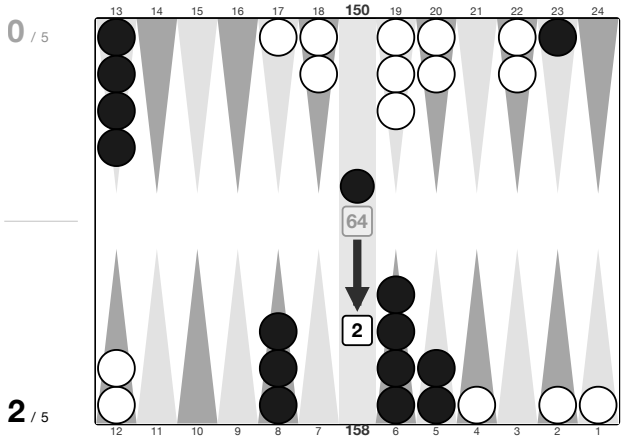
76



5A5A: White doubles to 2. Take or pass?

(a) DT **(b)** DP

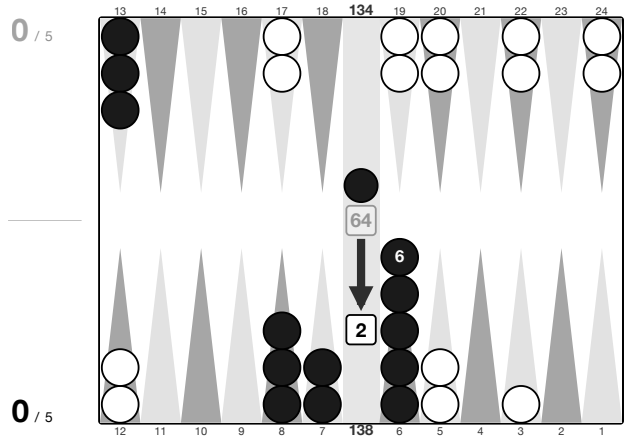
77



5A3A: White doubles to 2. Take or pass?

(a) DT **(b)** DP

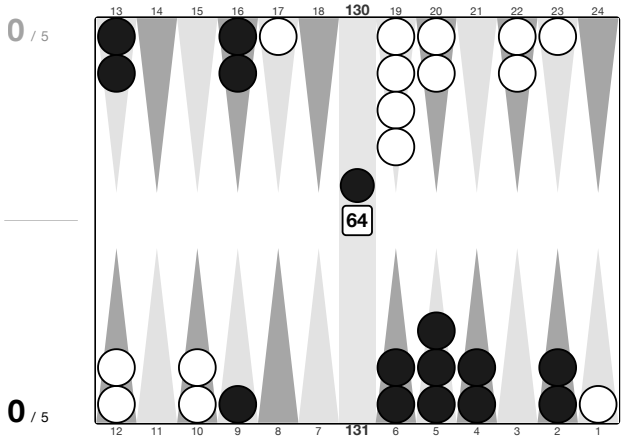
78



5A5A: White doubles to 2. Take or pass?

(a) DT **(b)** DP

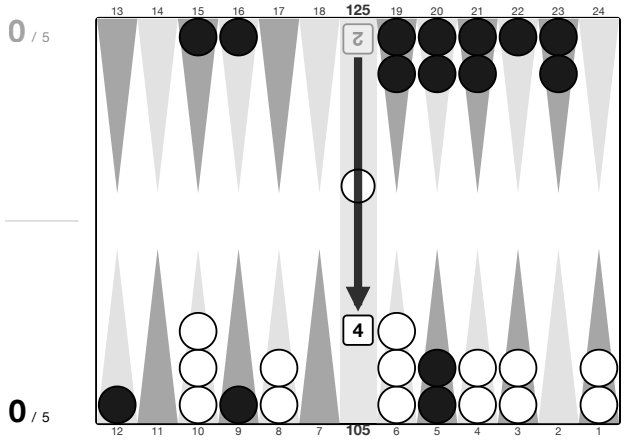
79



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

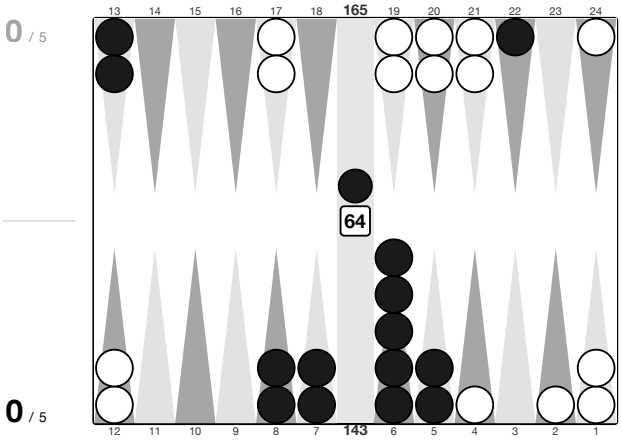
80



5A5A: Black doubles to 4. Take or pass?

(a) DT **(b)** DP

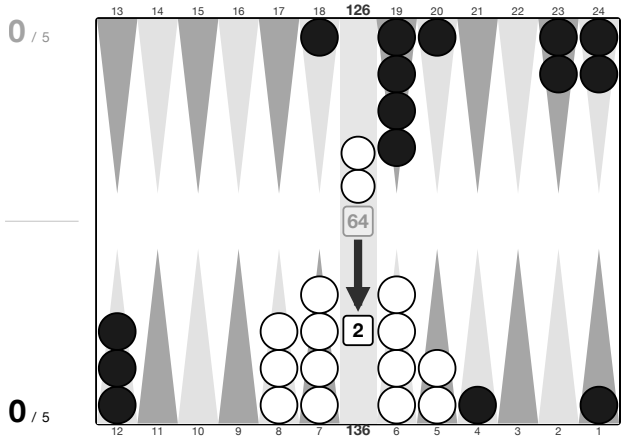
81



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

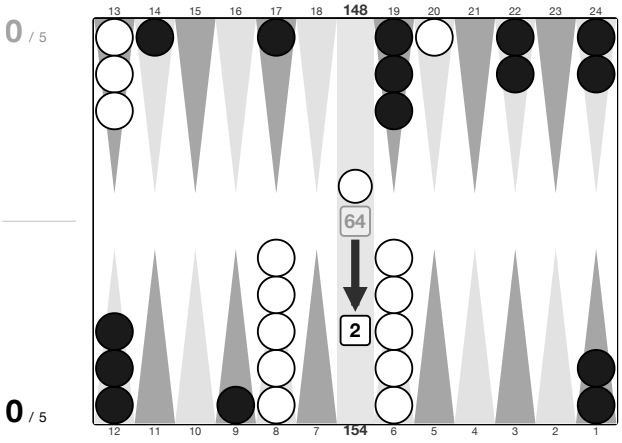
82



5A5A: Black doubles to 2. Take or pass?

(a) DT **(b)** DP

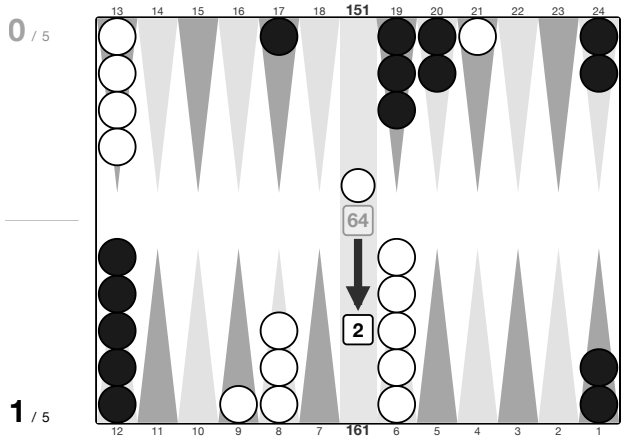
83



5A5A: Black doubles to 2. Take or pass?

(a) DT **(b)** DP

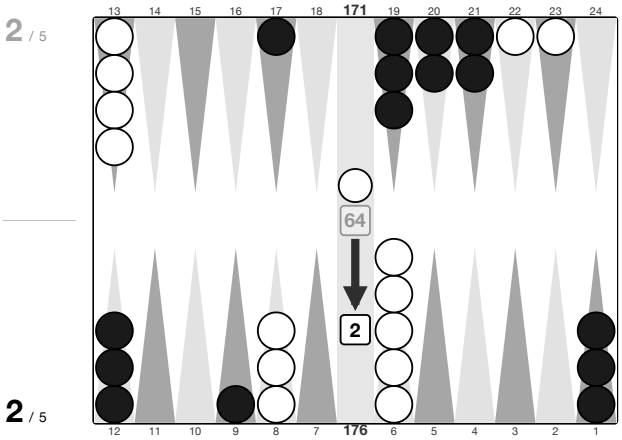
84



4A5A: Black doubles to 2. Take or pass?

(a) DT **(b)** DP

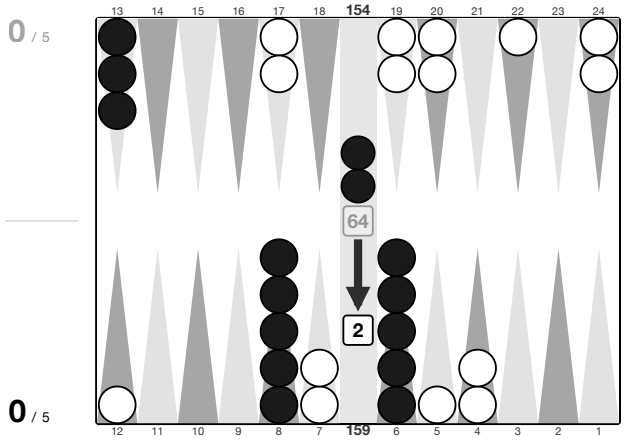
85



3A3A: Black doubles to 2. Take or pass?

(a) DT **(b)** DP

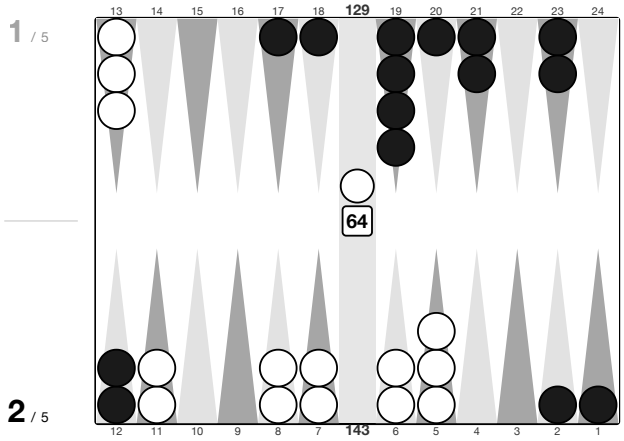
86



5A5A: White doubles to 2. Take or pass?

(a) DT **(b)** DP

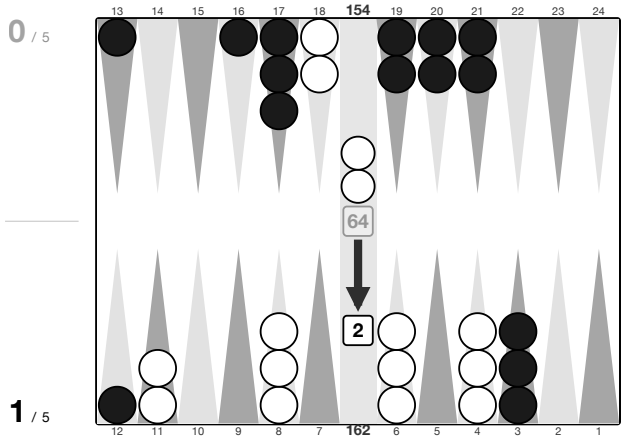
87



3A4A: White on roll. Cube action?

(a) ND **(b)** DT

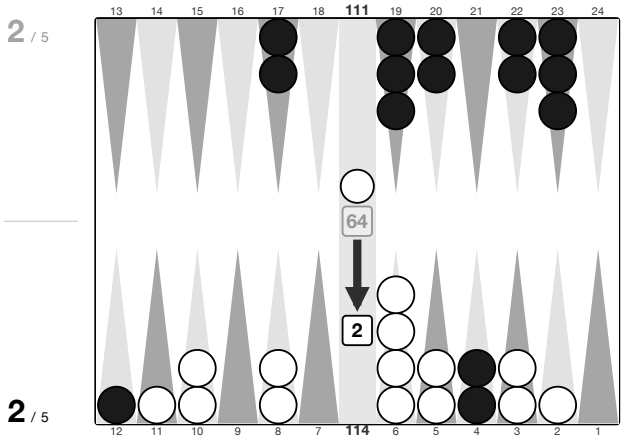
88



4A5A: Black doubles to 2. Take or pass?

(a) DT **(b)** DP

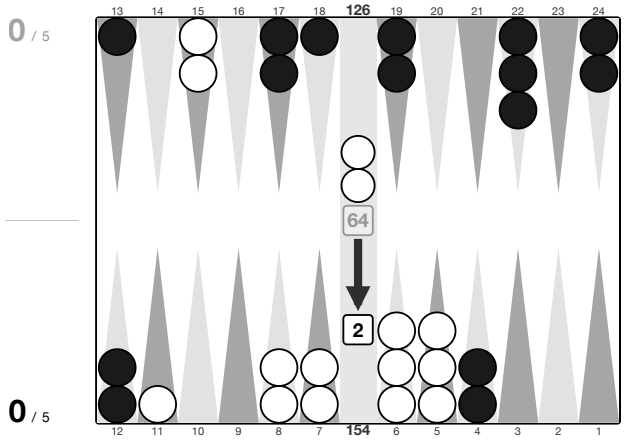
89



3A3A: Black doubles to 2. Take or pass?

(a) DT **(b)** DP

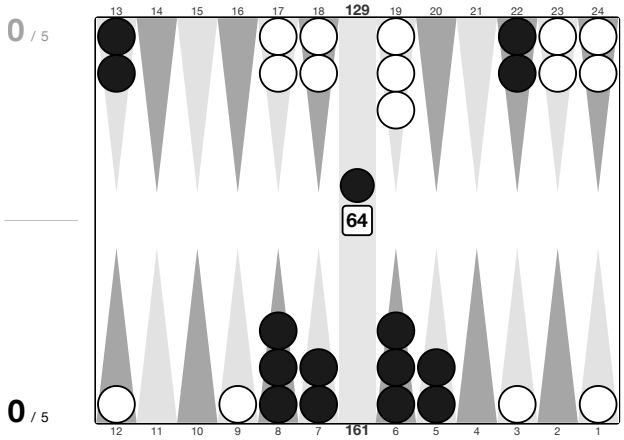
90



5A5A: Black doubles to 2. Take or pass?

(a) DT **(b)** DP

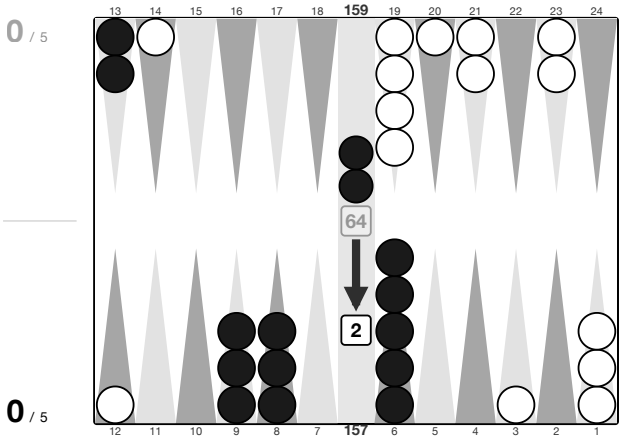
91



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

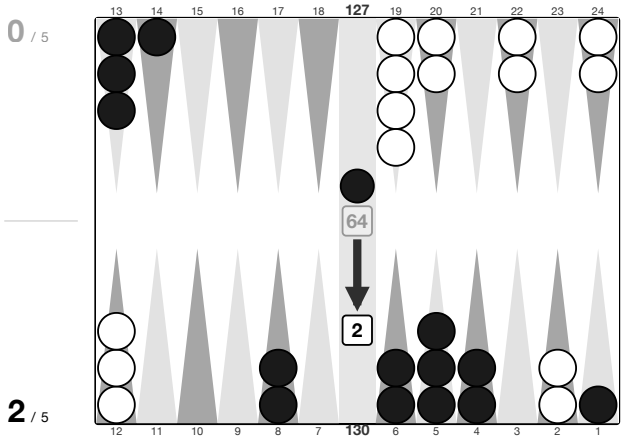
92



5A5A: White doubles to 2. Take or pass?

(a) DT **(b)** DP

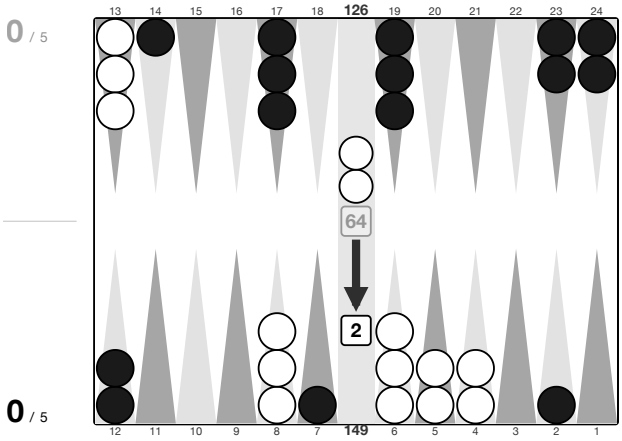
93



5A3A: White doubles to 2. Take or pass?

(a) DT **(b)** DP

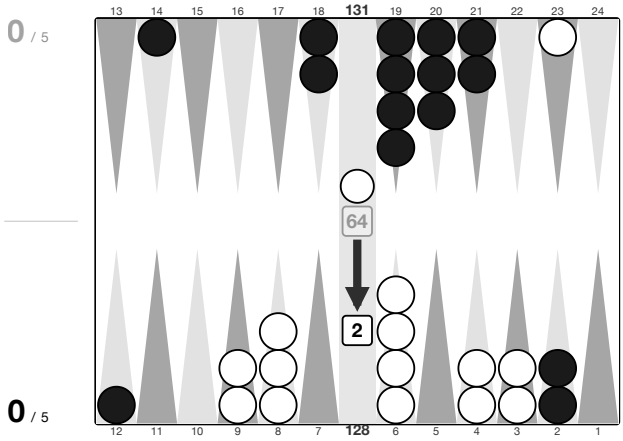
94



5A5A: Black doubles to 2. Take or pass?

(a) DT **(b)** DP

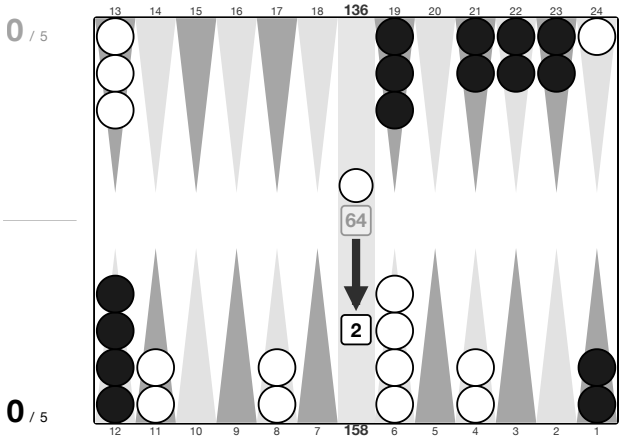
95



5A5A: Black doubles to 2. Take or pass?

(a) DT **(b)** DP

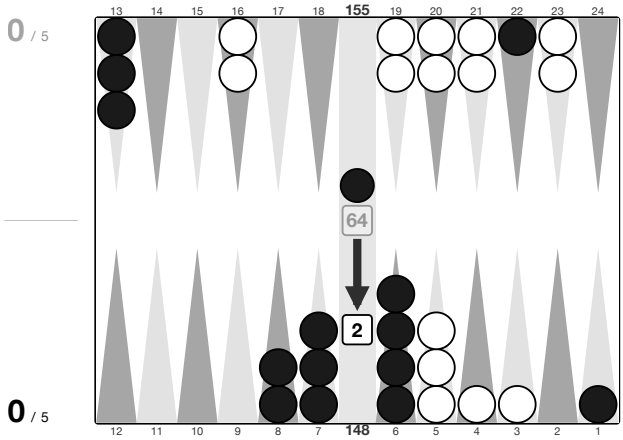
96



5A5A: Black doubles to 2. Take or pass?

(a) DT **(b)** DP

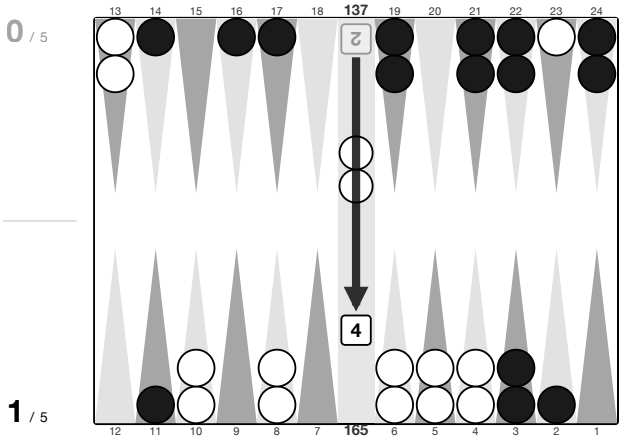
97



5A5A: White doubles to 2. Take or pass?

(a) DT **(b)** DP

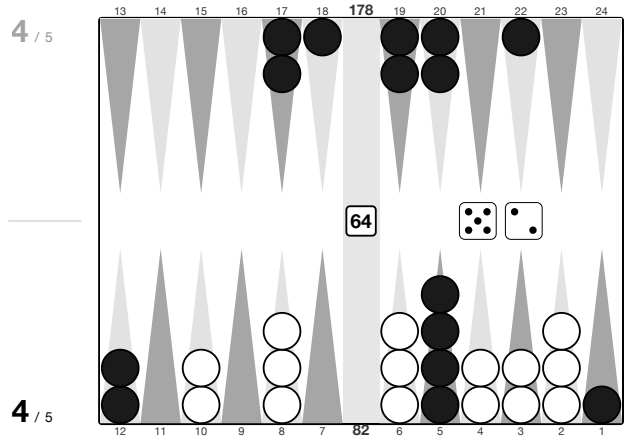
98



4A5A: Black doubles to 4. Take or pass?

(a) DT **(b)** DP

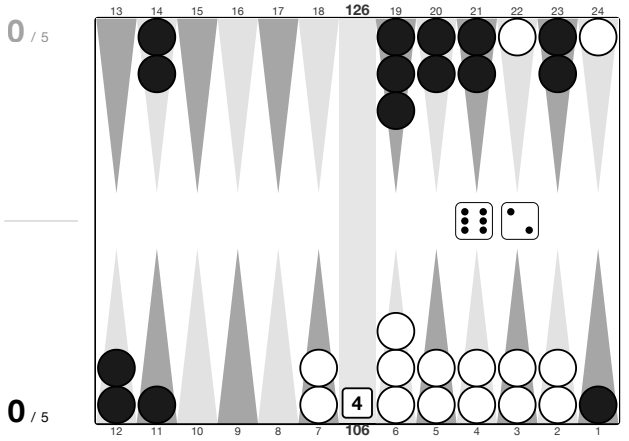
99



1A1A: White to play 52

(a) 8/1* **(b)** 8/3 6/4

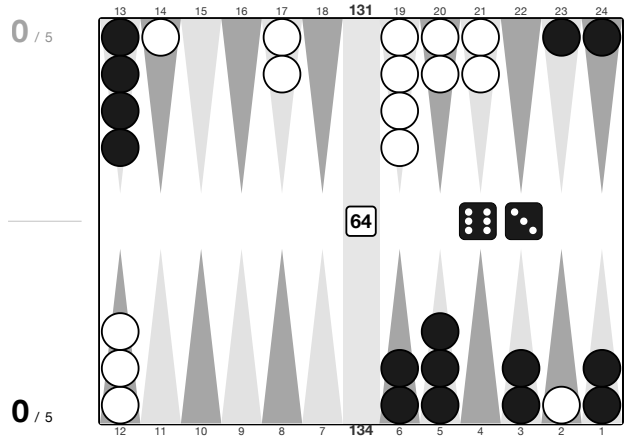
100



5A5A: White to play 62

(a) 24/16 **(b)** 24/22 7/1*

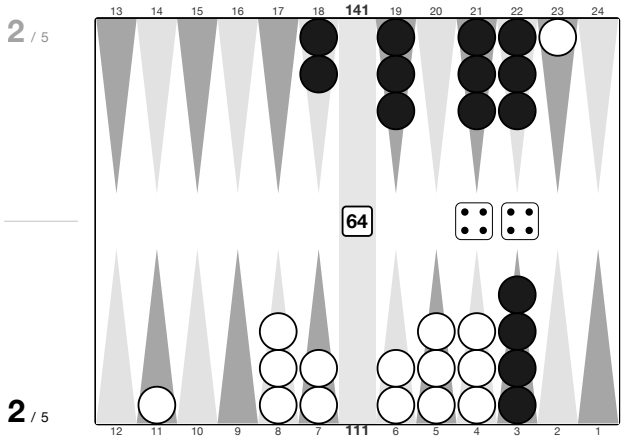
101



5A5A: Black to play 63

(a) 13/7 5/2* **(b)** 24/18 5/2*

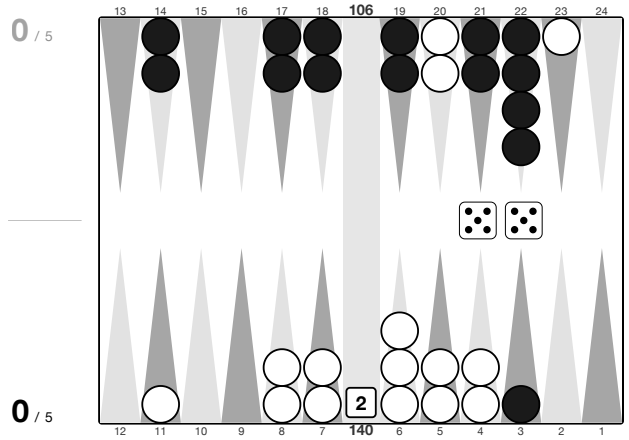
102



3A3A: White to play 44

(a) 11/7 8/4(3) **(b)** 11/7 8/4 6/2(2)

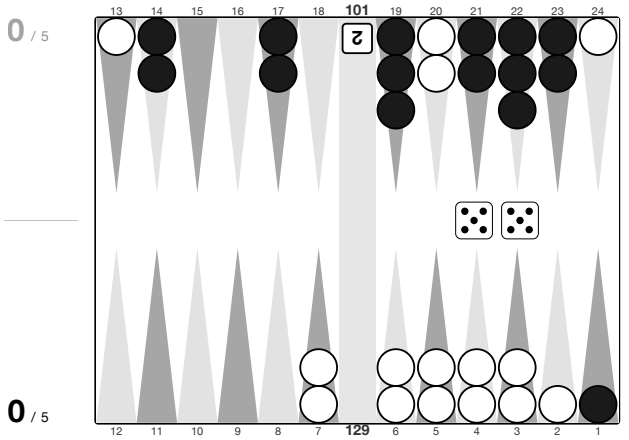
103



5A5A: White to play 55

(a) 20/15(2) 8/3*(2) **(b)** 8/3*(2) 7/2(2)

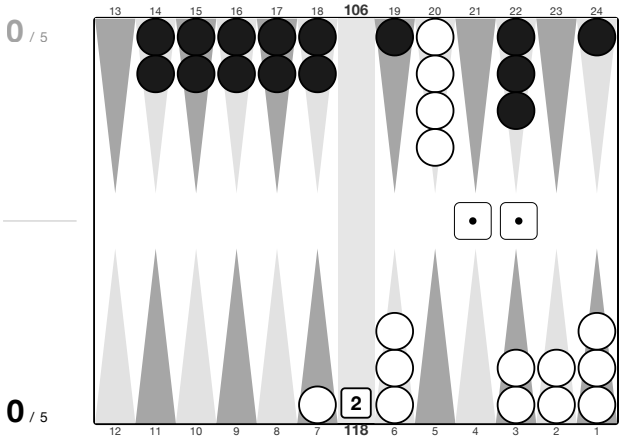
104



5A5A: White to play 55

(a) 20/15(2) 7/2(2) **(b)** 20/10 20/15 13/8

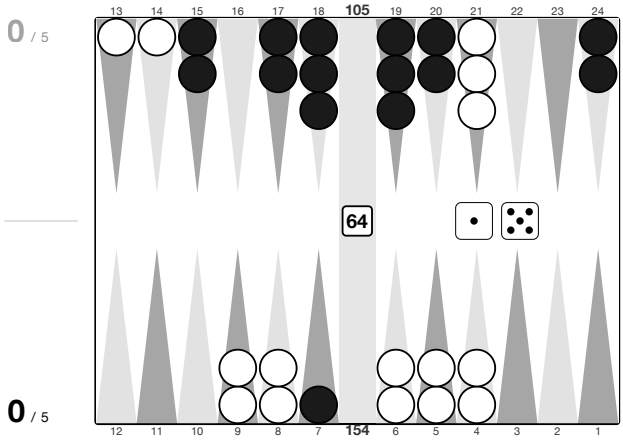
105



5A5A: White to play 11

(a) 20/19*(3) 7/6 **(b)** 20/19* 7/5 6/5

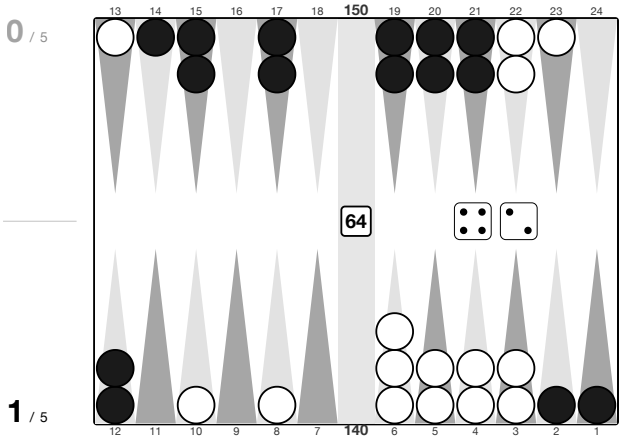
106



5A5A: White to play 51

(a) 21/16 8/7* **(b)** 13/7*

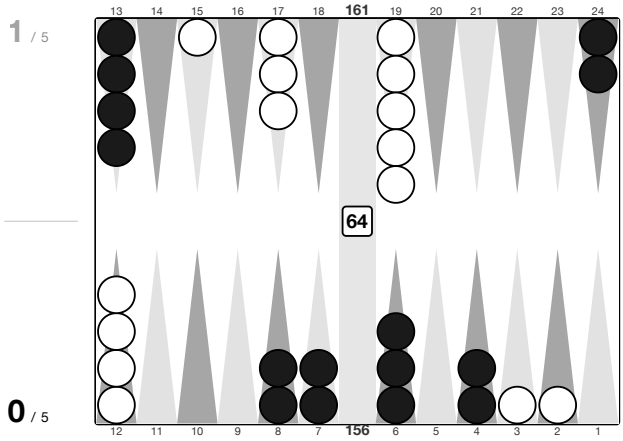
107



4A5A: White to play 42

(a) 13/11 6/2* **(b)** 10/8 6/2*

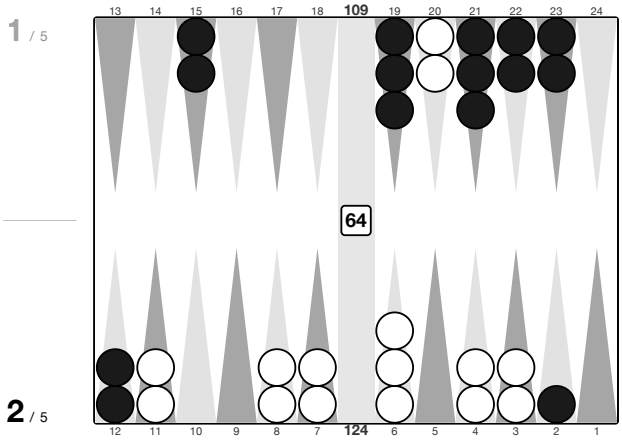
108



4A5A: Black on roll. Cube action?

(a) ND **(b)** DT

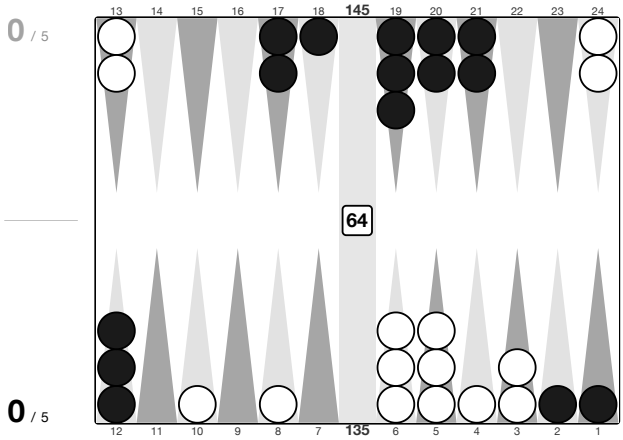
109



3A4A: White on roll. Cube action?

(a) ND **(b)** DT

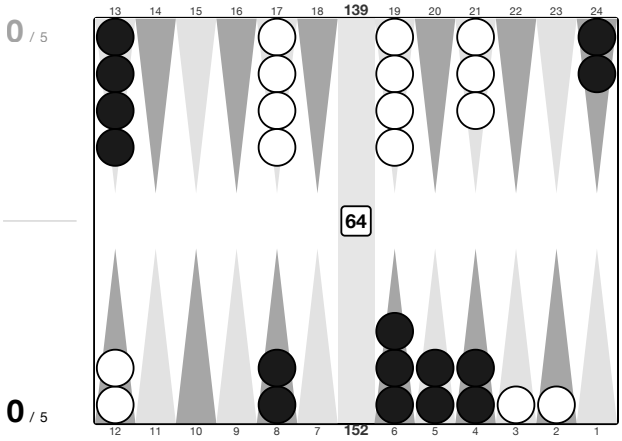
110



5A5A: White on roll. Cube action?

(a) ND **(b)** DT

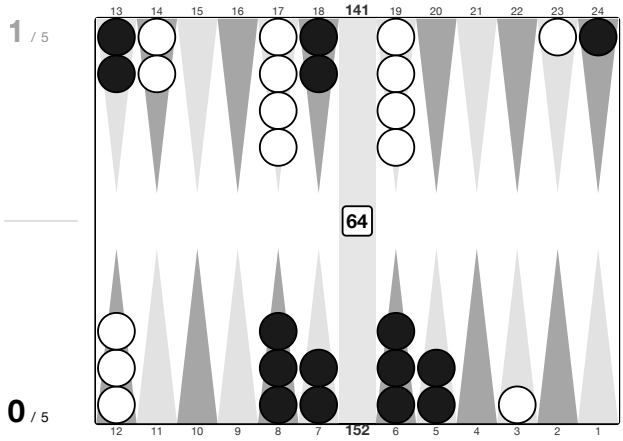
111



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

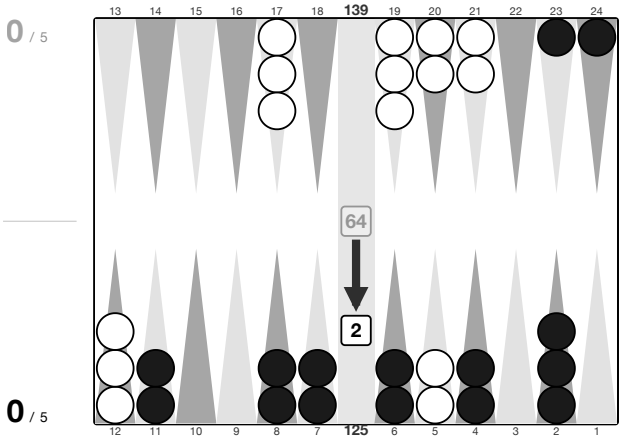
112



4A5A: Black on roll. Cube action?

(a) ND **(b)** DT

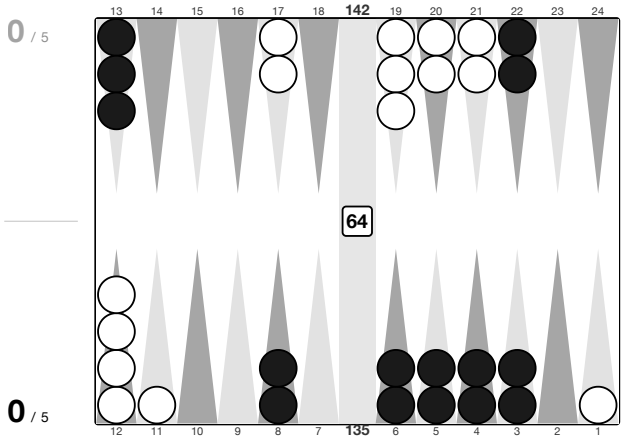
113



5A5A: White doubles to 2. Take or pass?

(a) DT **(b)** DP

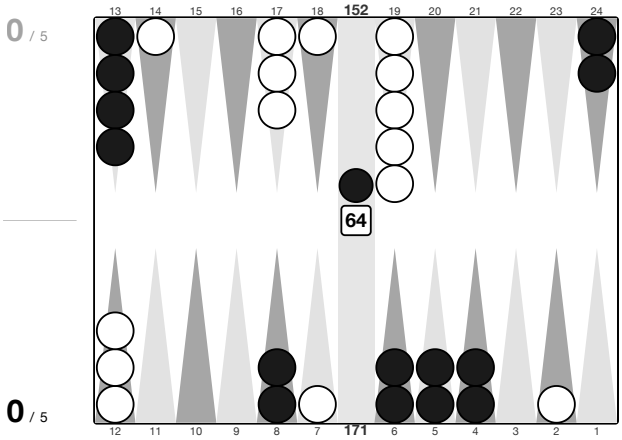
114



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

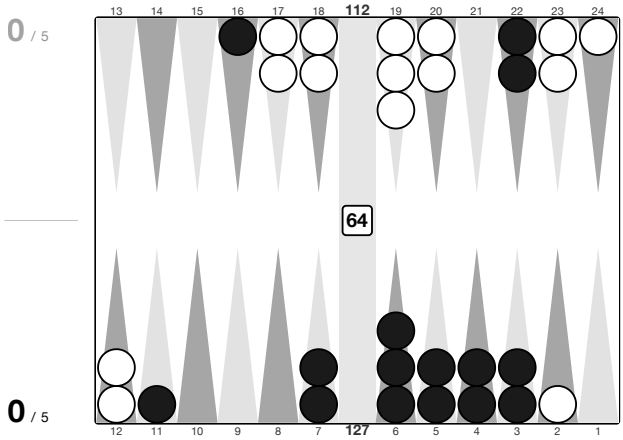
115



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

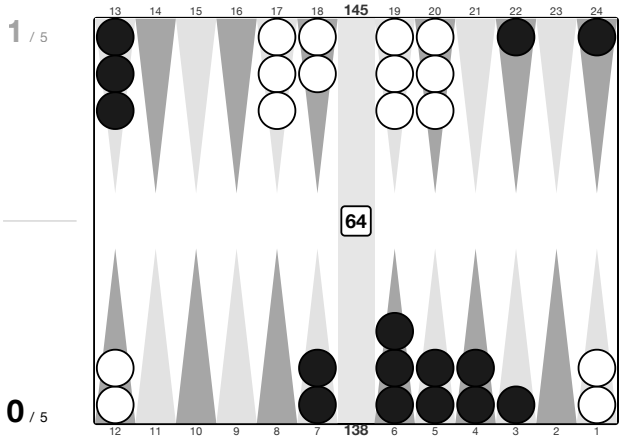
116



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

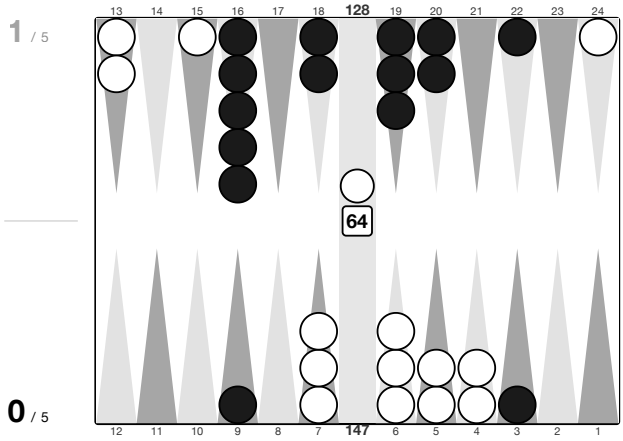
117



4A5A: Black on roll. Cube action?

(a) ND **(b)** DT

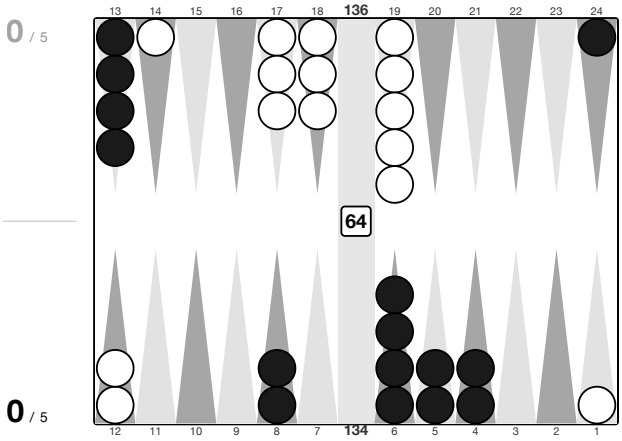
118



5A4A: White on roll. Cube action?

(a) ND **(b)** DT

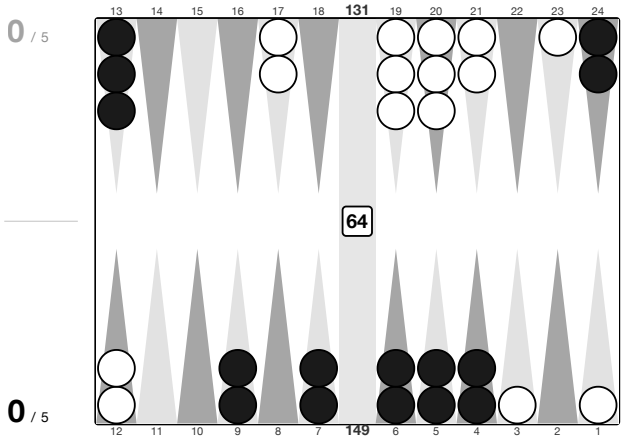
119



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

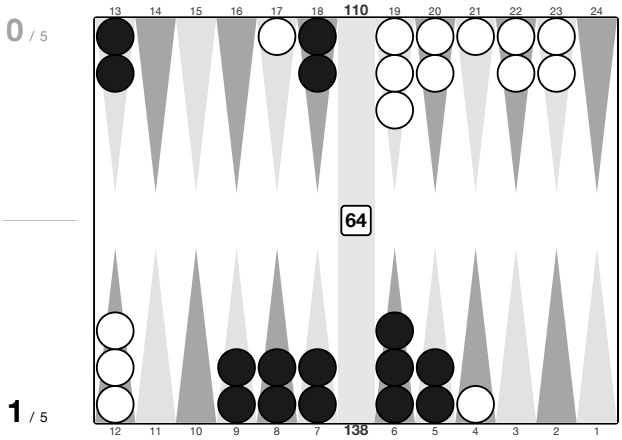
120



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

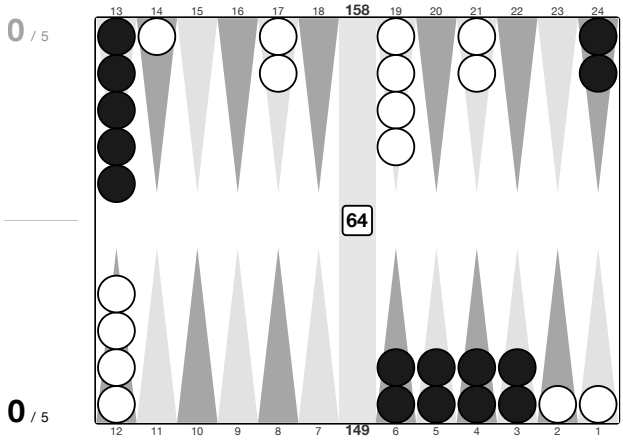
121



5A4A: Black on roll. Cube action?

(a) ND **(b)** DT

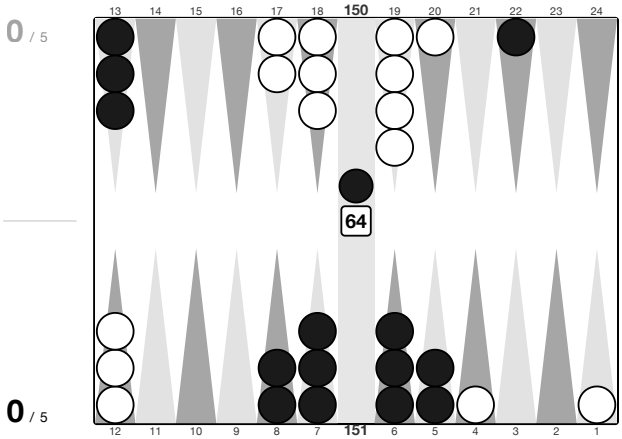
122



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

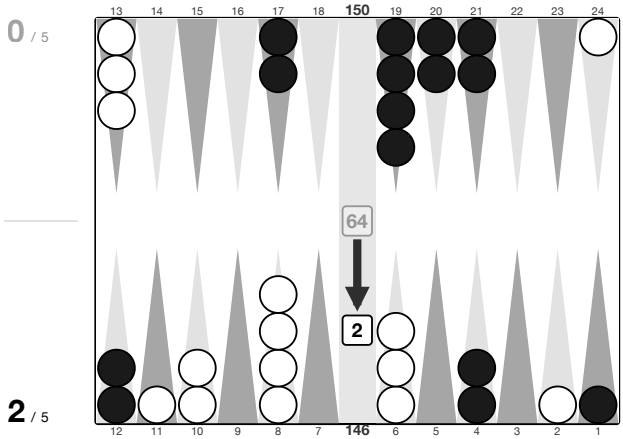
123



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

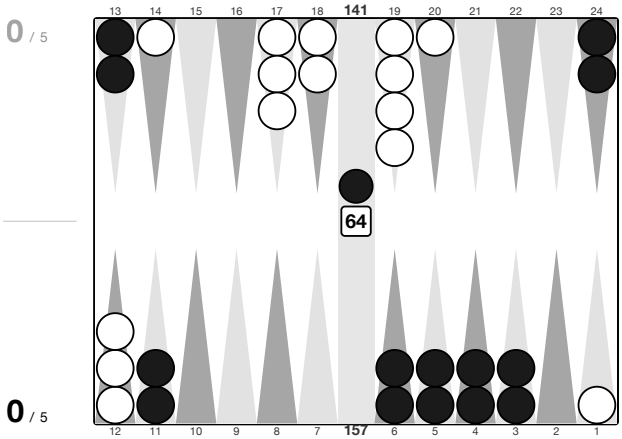
124



3A5A: Black doubles to 2. Take or pass?

(a) DT **(b)** DP

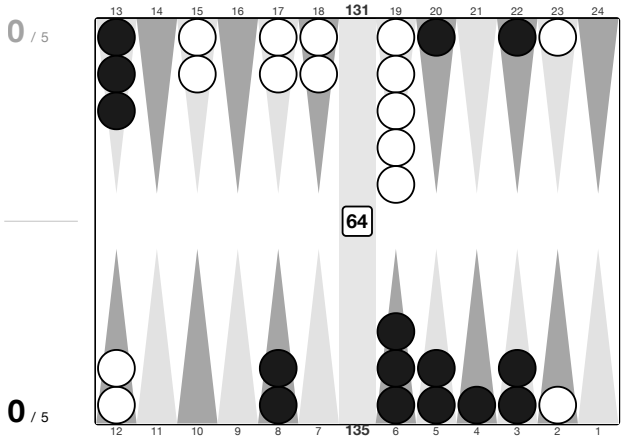
125



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

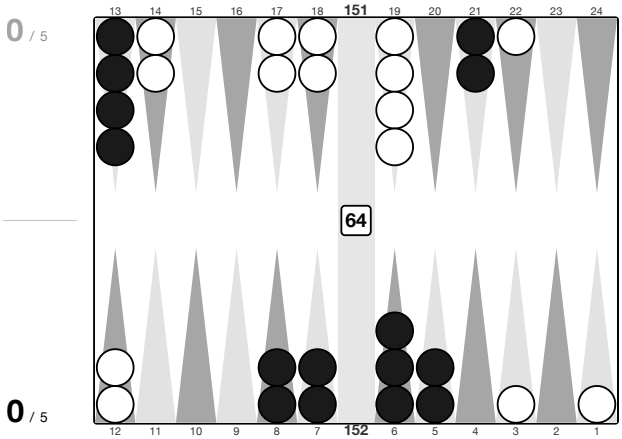
126



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

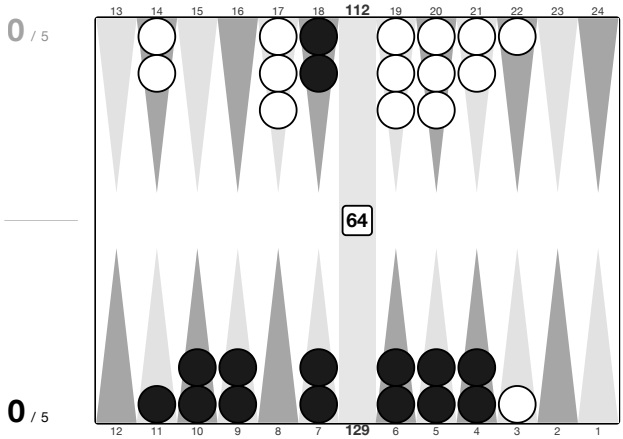
127



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

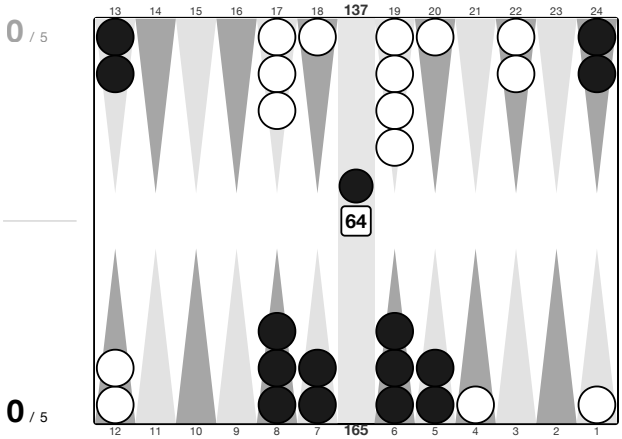
128



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

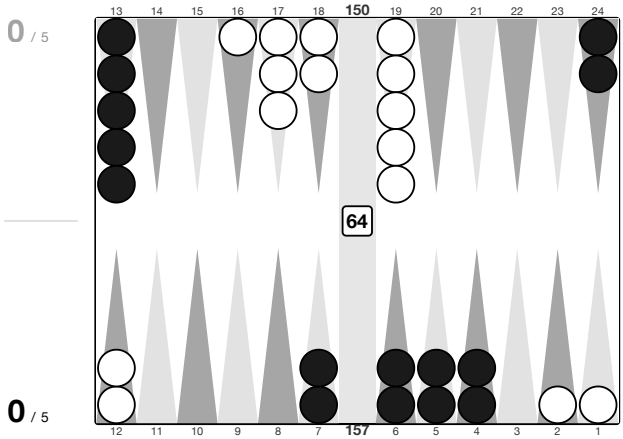
129



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

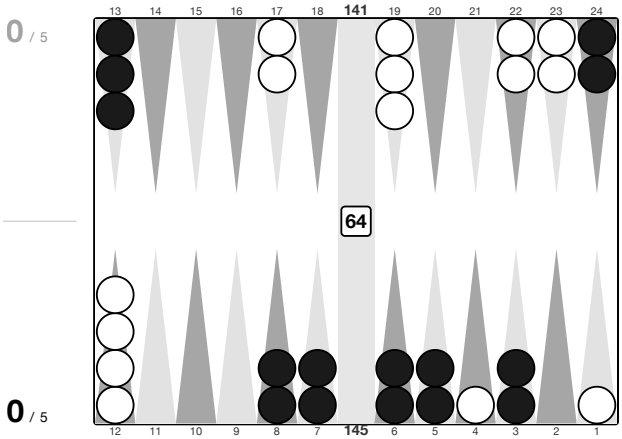
130



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

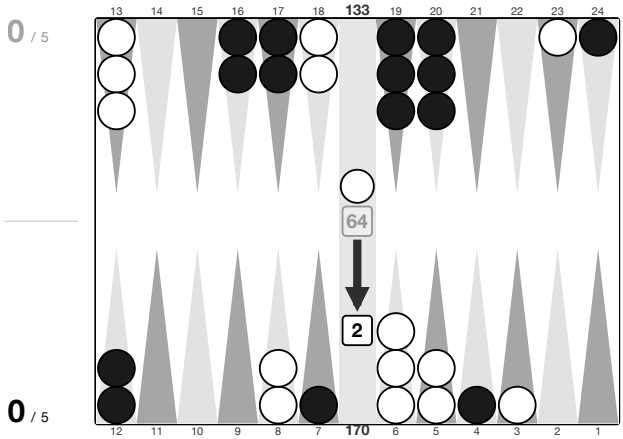
131



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

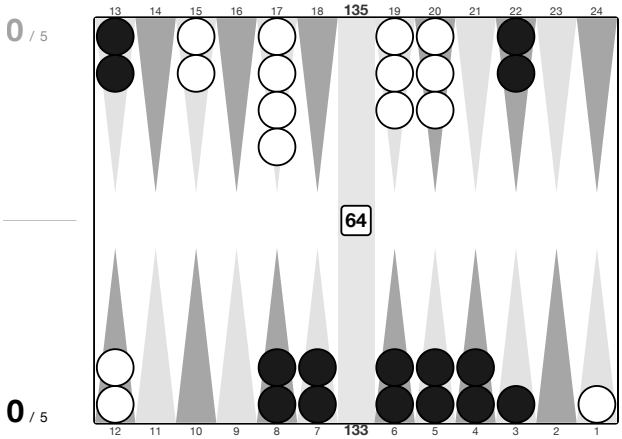
132



5A5A: Black doubles to 2. Take or pass?

(a) DT **(b)** DP

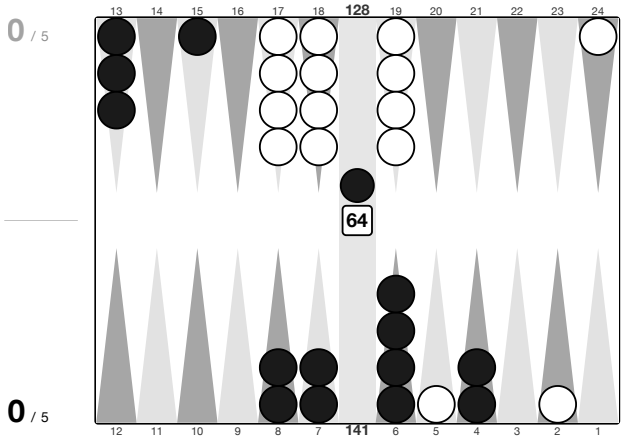
133



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

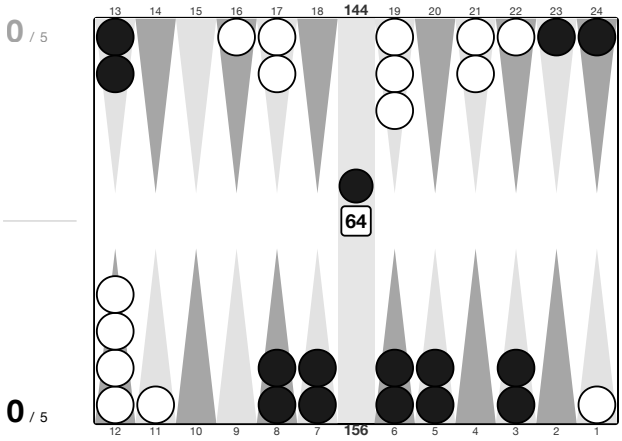
134



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

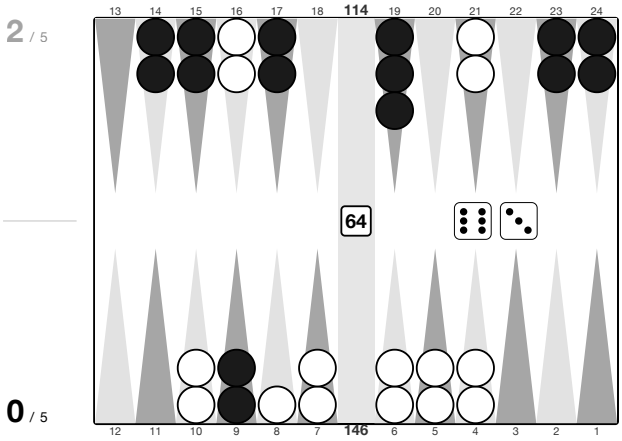
135



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

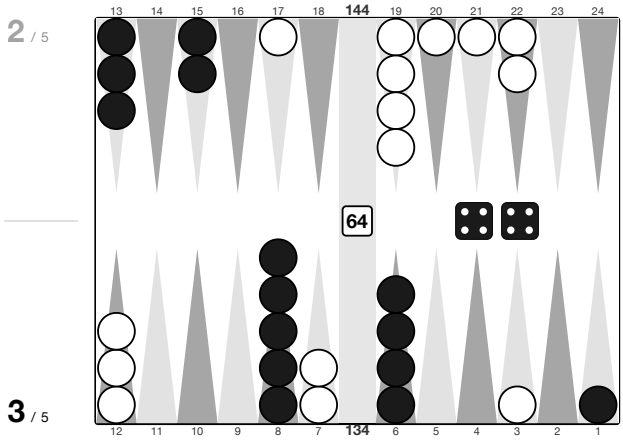
136



5A3A: White to play 63

(a) 8/2 5/2 **(b)** 10/7 10/4

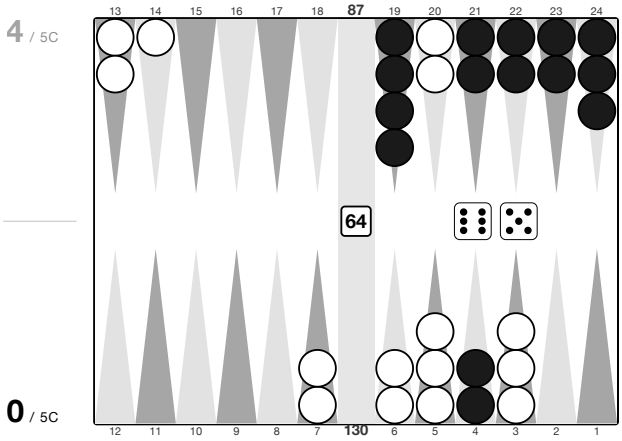
137



3A2A: Black to play 44

(a) 13/9(3) 6/2 **(b)** 15/11(2) 8/4(2)

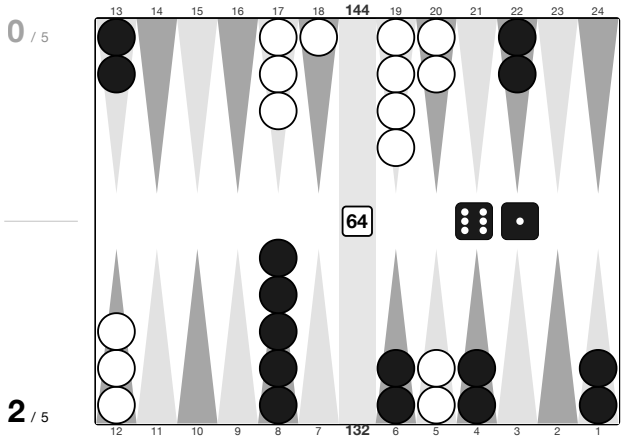
138



5A1AC: White to play 65

(a) 20/15 20/14 **(b)** 14/8 13/8

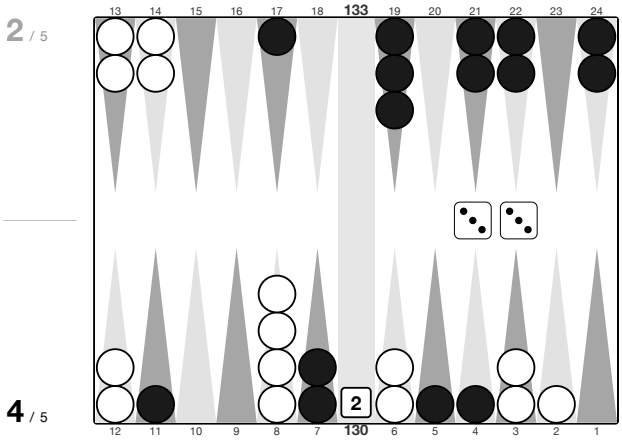
139



5A3A: Black to play 61

(a) 13/7 8/7 **(b)** 22/21 22/16

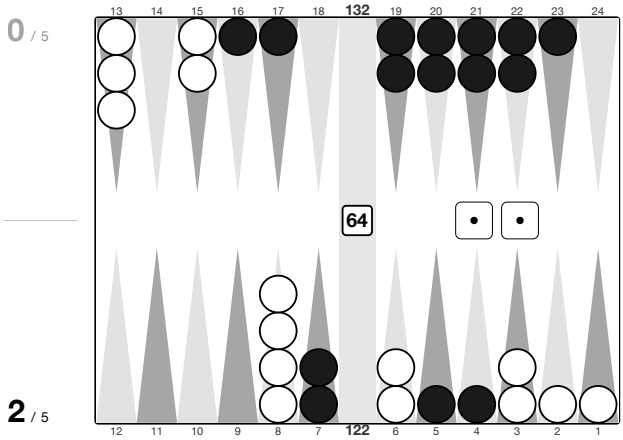
140



1A3A: White to play 33

(a) 13/10(2) 12/9(2) **(b)** 14/11*(2) 8/5*/2

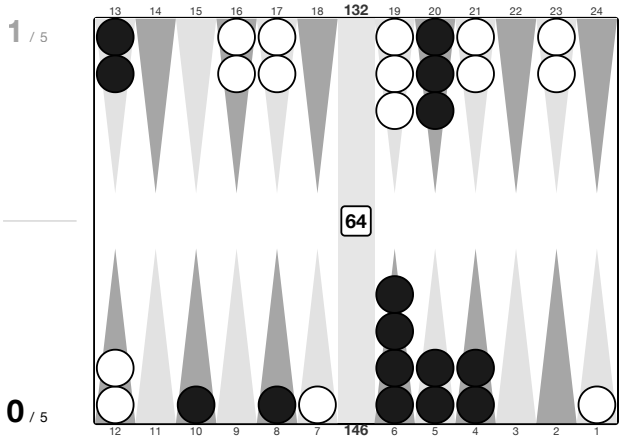
141



3A5A: White to play 11

(a) 13/12(3) 2/1 **(b)** 15/14 6/5*(2) 2/1

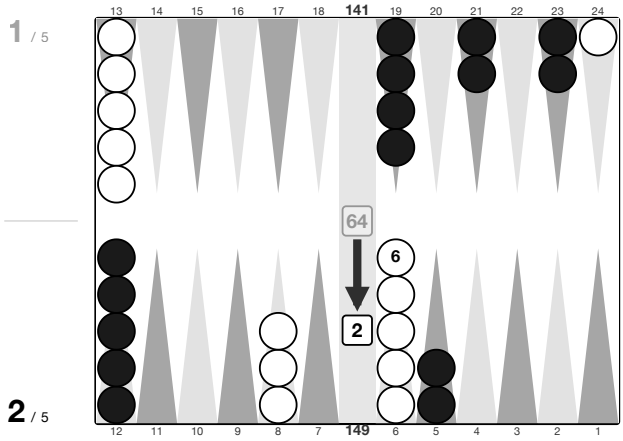
142



4A5A: Black on roll. Cube action?

(a) ND **(b)** DT

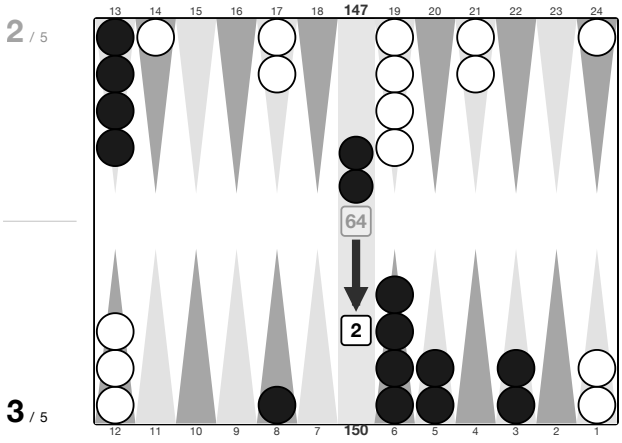
143



3A4A: Black doubles to 2. Take or pass?

(a) DT **(b)** DP

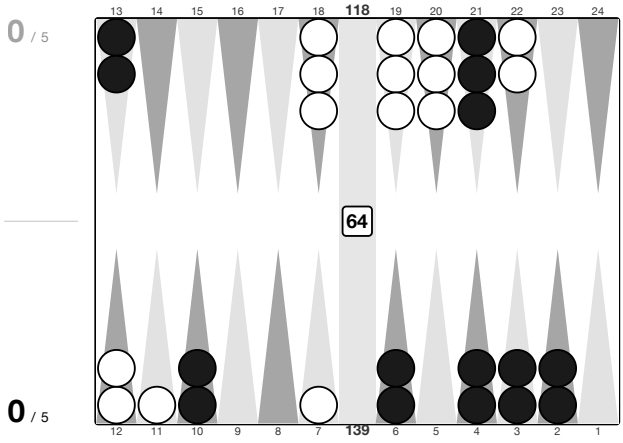
144



3A2A: White doubles to 2. Take or pass?

(a) DT **(b)** DP

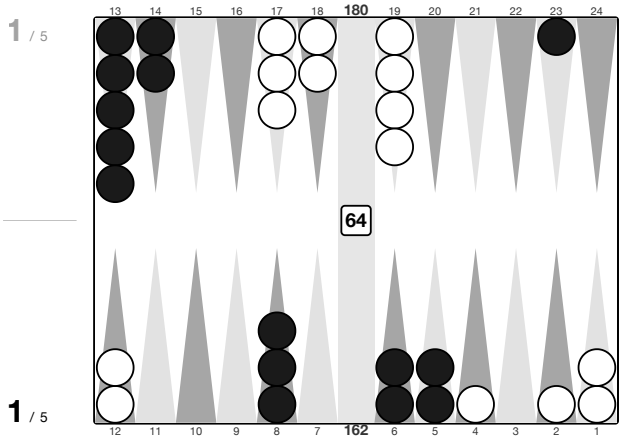
145



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

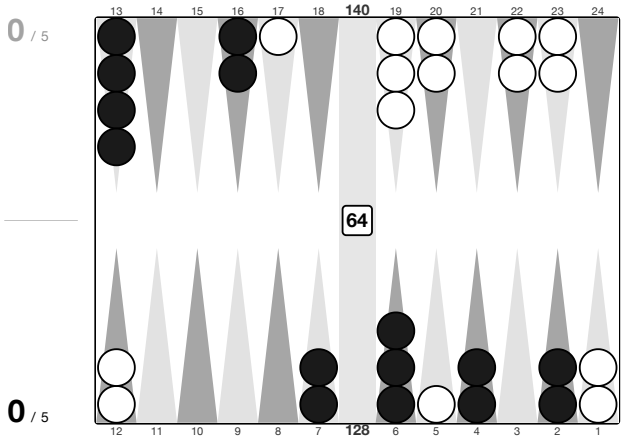
146



4A4A: Black on roll. Cube action?

(a) ND **(b)** DT

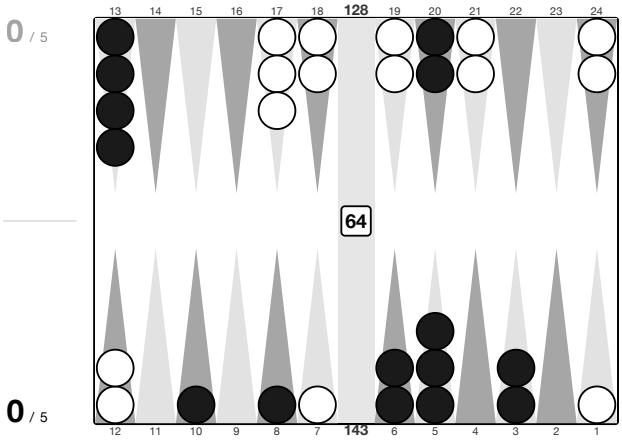
147



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

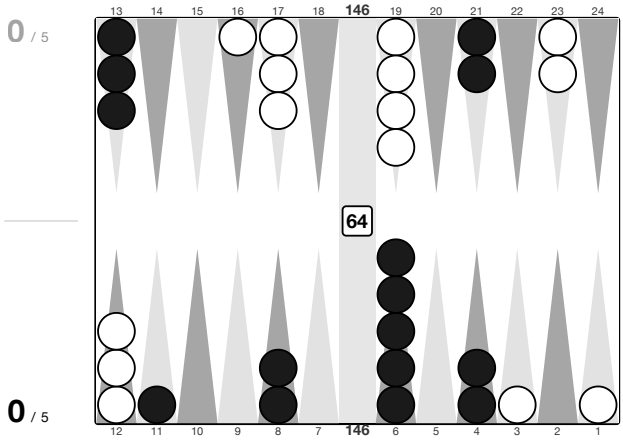
148



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

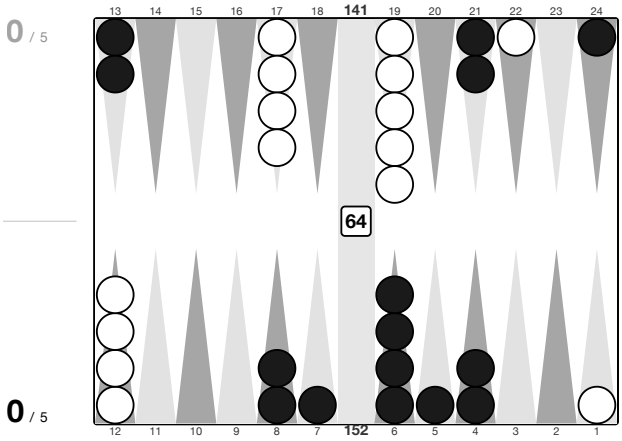
149



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

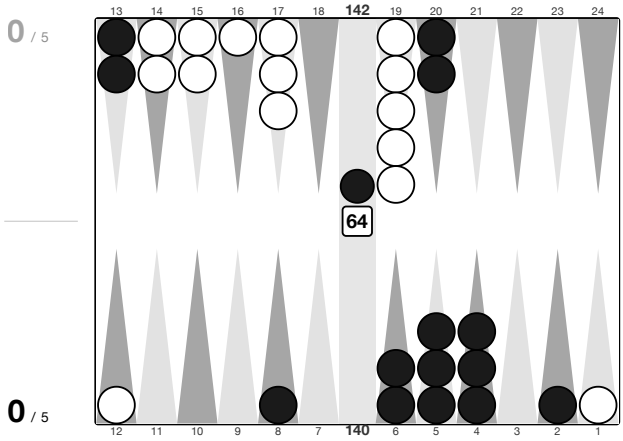
150



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

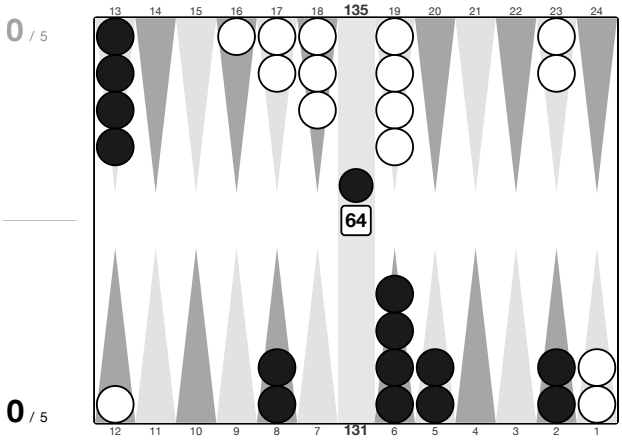
151



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

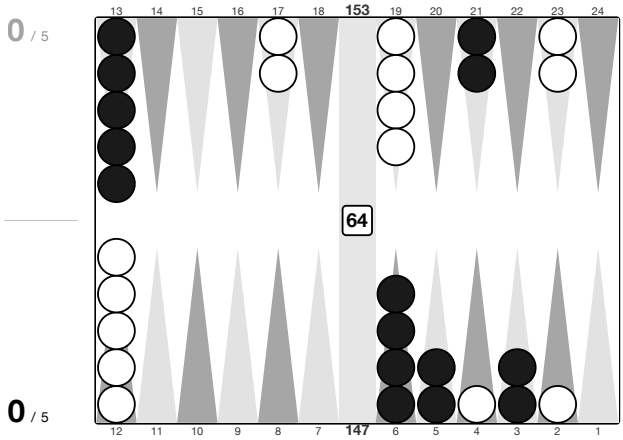
152



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

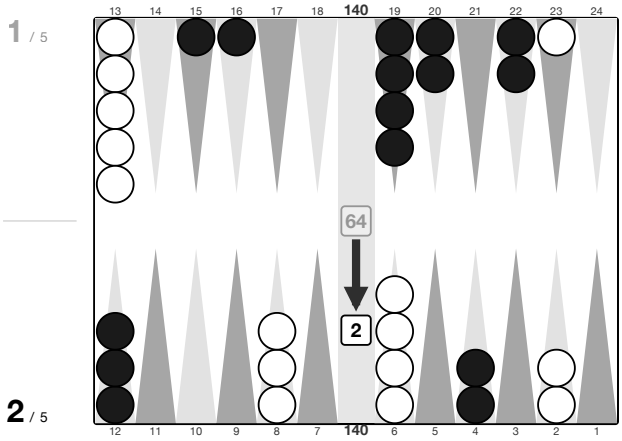
153



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

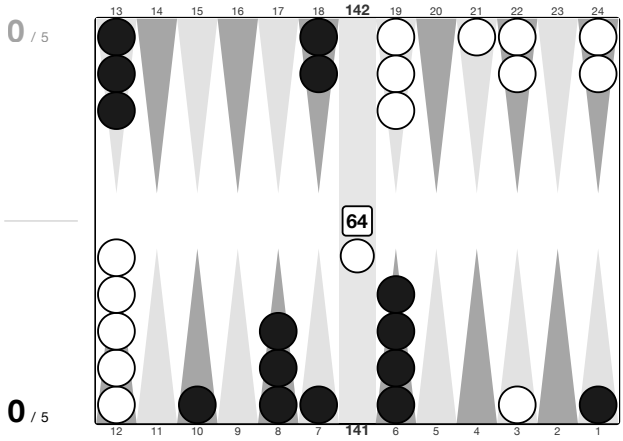
154



3A4A: Black doubles to 2. Take or pass?

(a) DT **(b)** DP

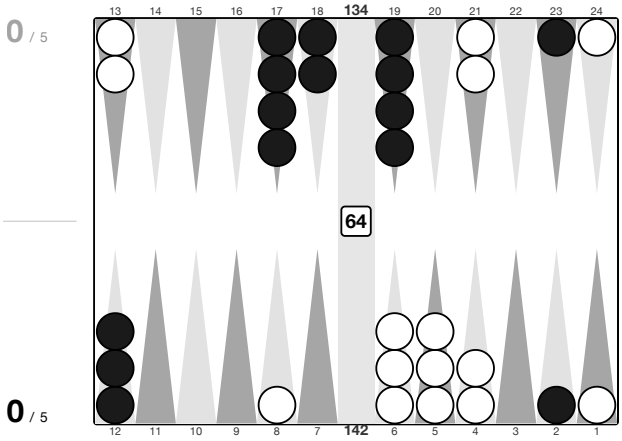
155



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

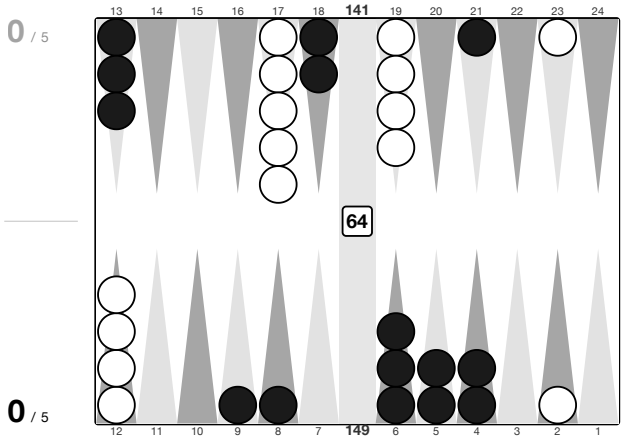
156



5A5A: White on roll. Cube action?

(a) ND **(b)** DT

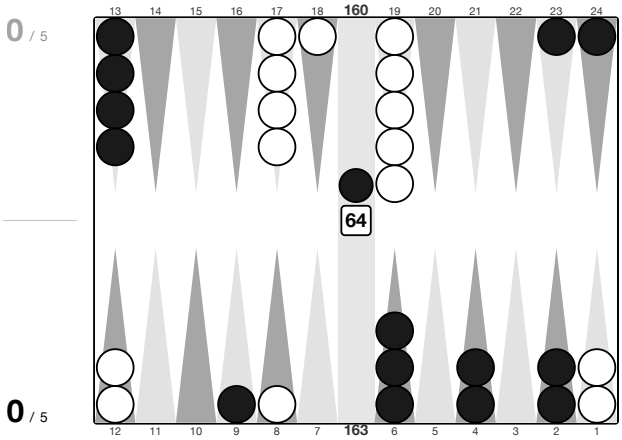
157



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

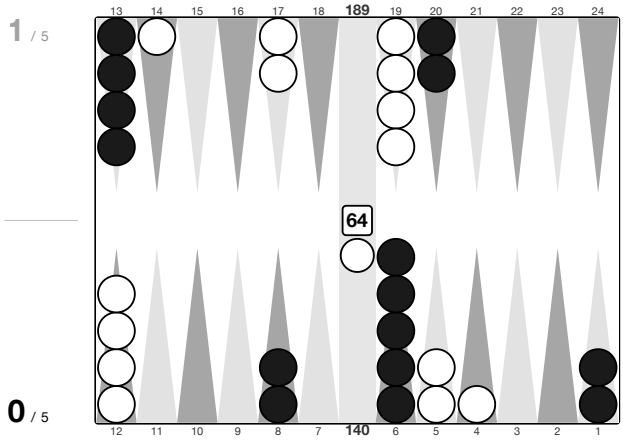
158



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

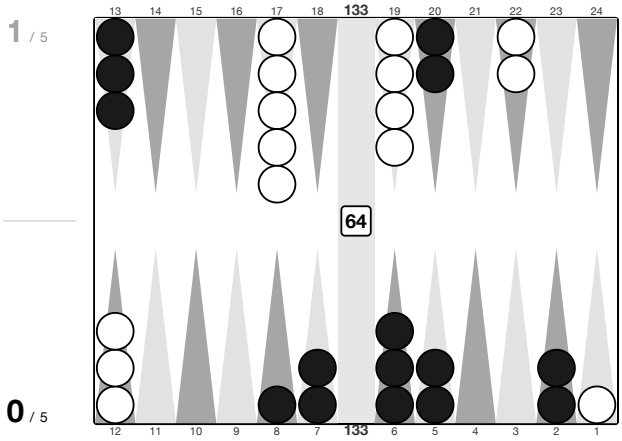
159



4A5A: Black on roll. Cube action?

(a) ND **(b)** DT

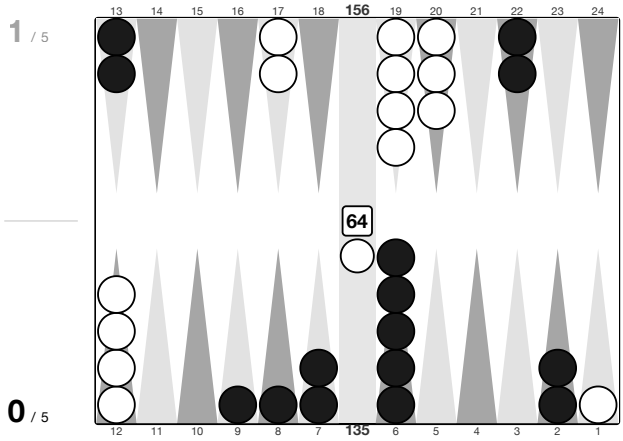
160



4A5A: Black on roll. Cube action?

(a) ND **(b)** DT

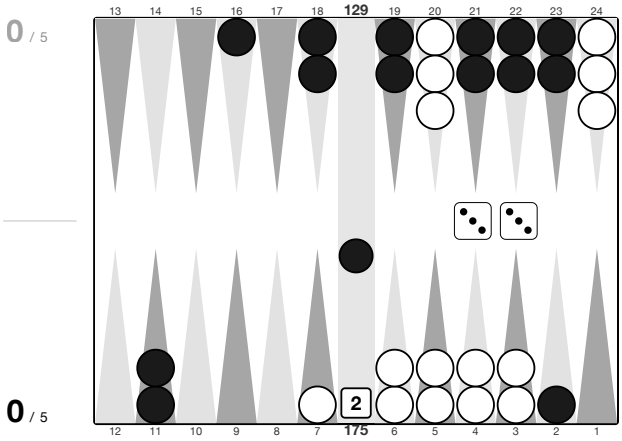
161



4A5A: Black on roll. Cube action?

(a) ND **(b)** DT

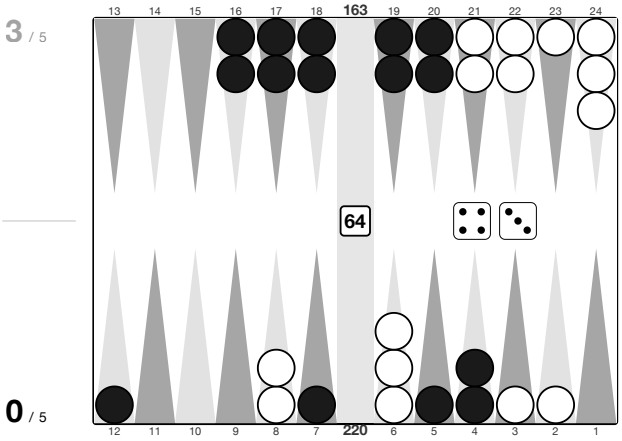
162



5A5A: White to play 33

(a) 20/14 5/2*(2) **(b)** 20/17(3) 7/4

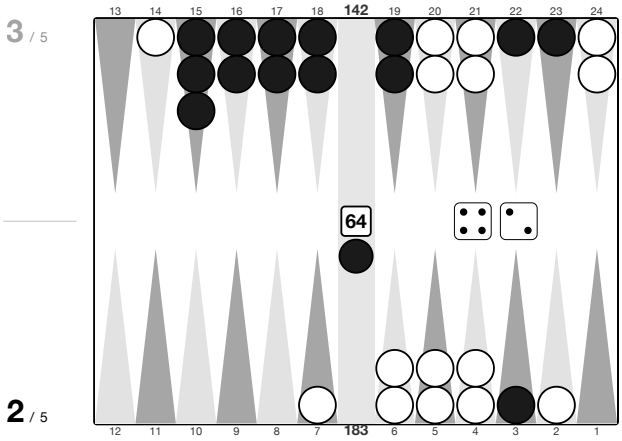
163



5A2A: White to play 43

(a) 8/5*/1 **(b)** 24/21 6/2

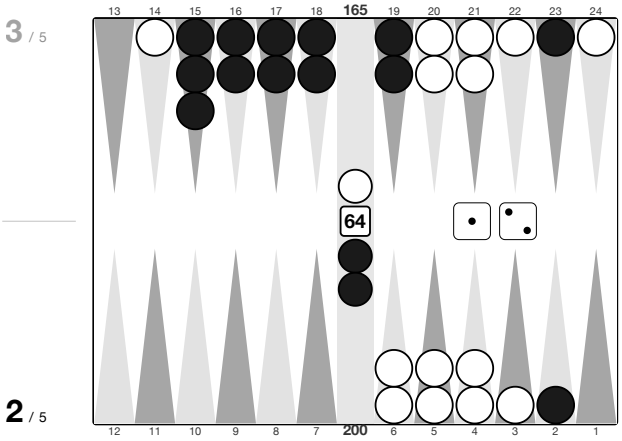
164



3A2A: White to play 42

(a) 24/22* 7/3* **(b)** 14/12 7/3*

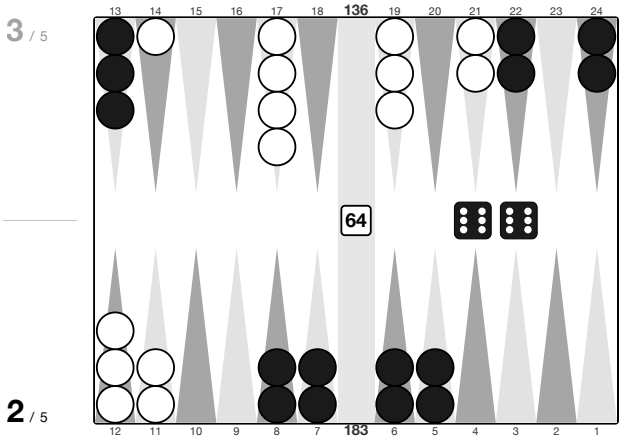
165



3A2A: White to play 21

(a) bar/23* 3/2* **(b)** bar/24 22/20

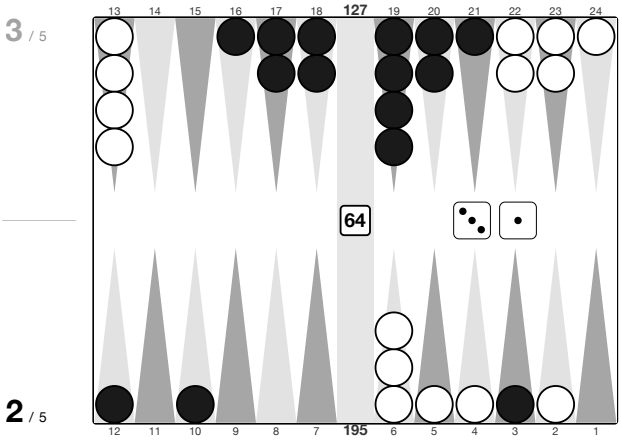
166



2A3A: Black to play 66

(a) 24/18 22/16(2) 13/7 **(b)** 24/18(2) 22/16 13/7

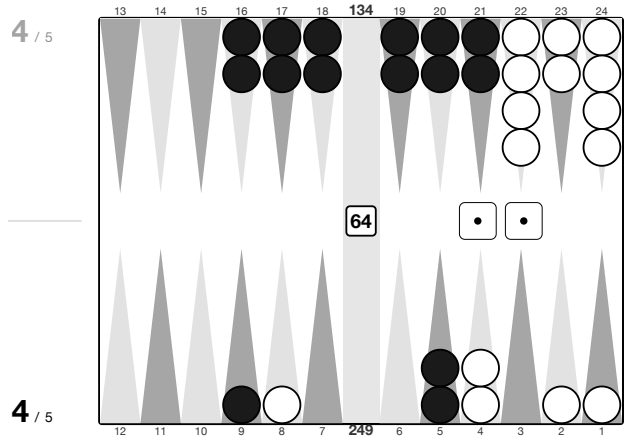
167



3A2A: White to play 31

(a) 24/21* 4/3* **(b)** 13/10* 6/5

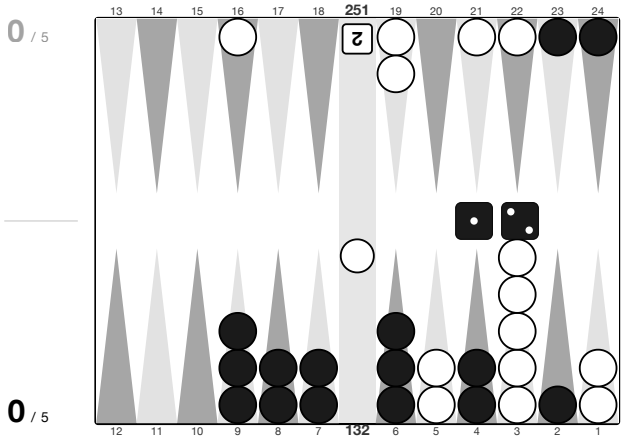
168



1A1A: White to play 11

(a) 8/6 4/3(2) **(b)** 24/22 24/23 4/3

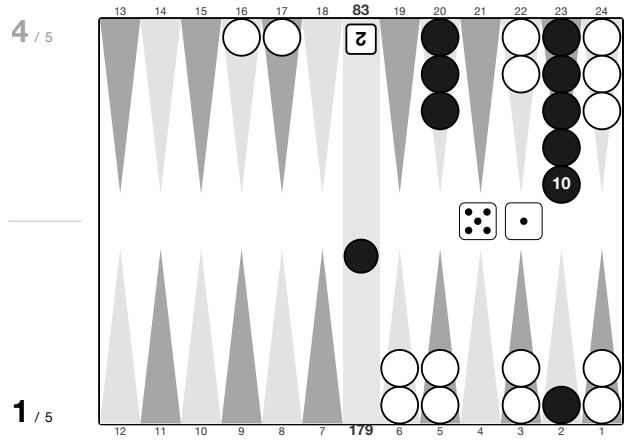
169



5A5A: Black to play 21

(a) 23/22* 6/4 **(b)** 24/21*

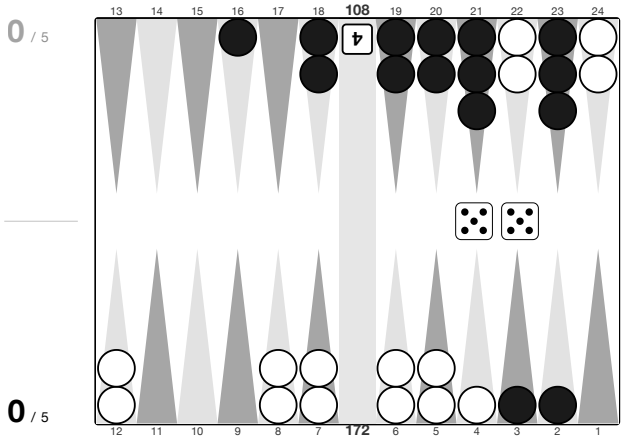
170



4A1A: White to play 51

(a) 22/16 **(b)** 24/19 16/15

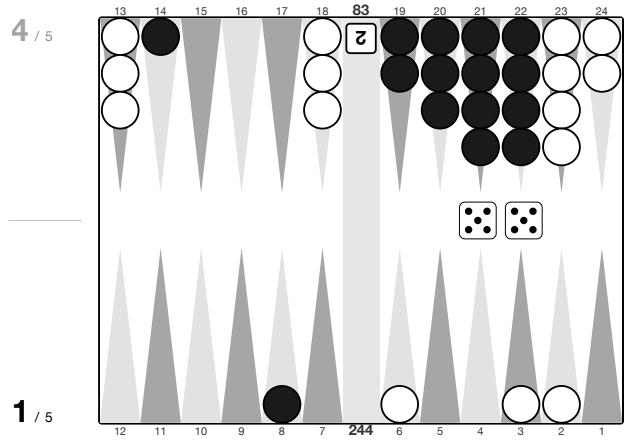
171



5A5A: White to play 55

(a) 8/3*(2) 7/2*(2) **(b)** 22/7 22/17

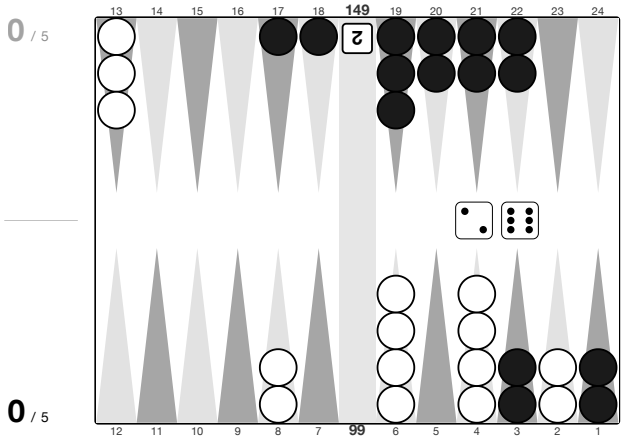
172



4A1A: White to play 55

(a) 23/18(4) **(b)** 23/8* 13/8

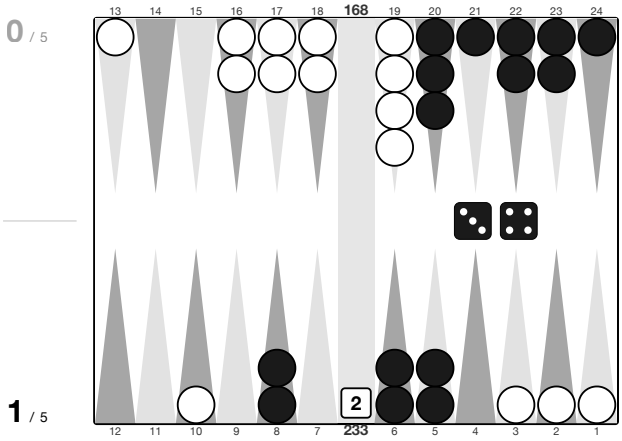
173



5A5A: White to play 62

(a) 13/5 **(b)** 8/6 8/2

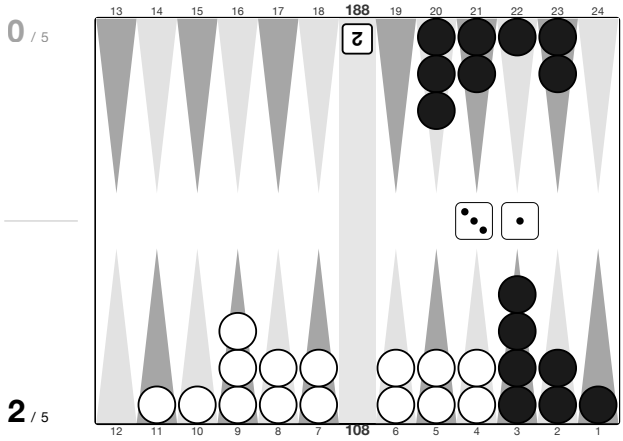
174



5A4A: Black to play 43

(a) 24/20 23/20 **(b)** 24/21 8/4

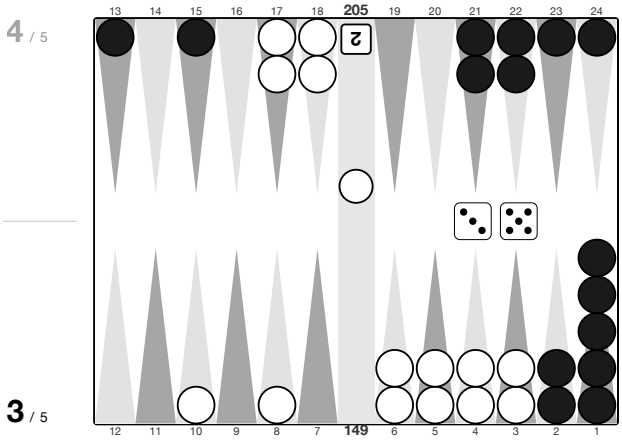
175



3A5A: White to play 31

(a) 9/5 **(b)** 11/10 4/1*

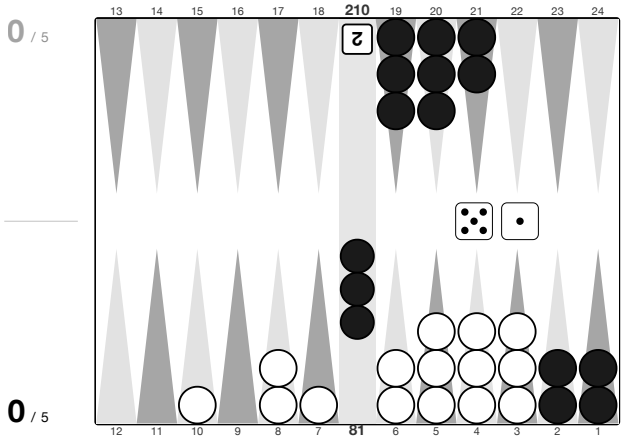
176



2A1A: White to play 53

(a) bar/17 **(b)** bar/20 18/15*

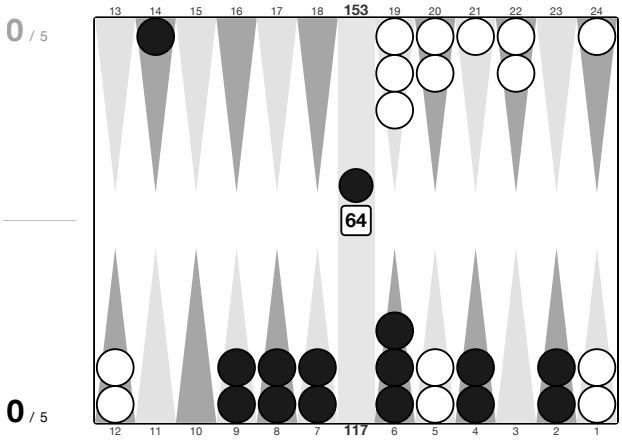
177



5A5A: White to play 51

(a) 10/4 **(b)** 8/3 7/6

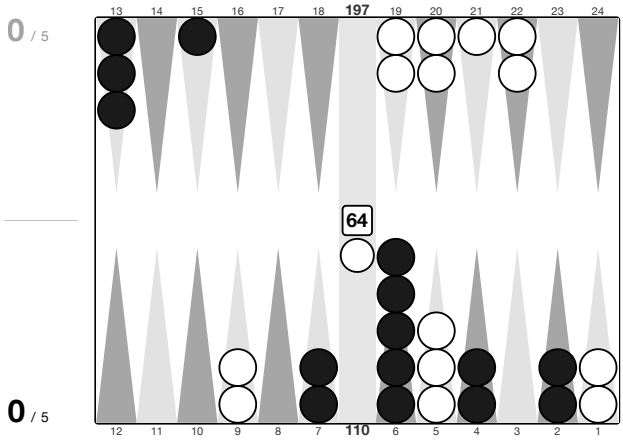
178



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

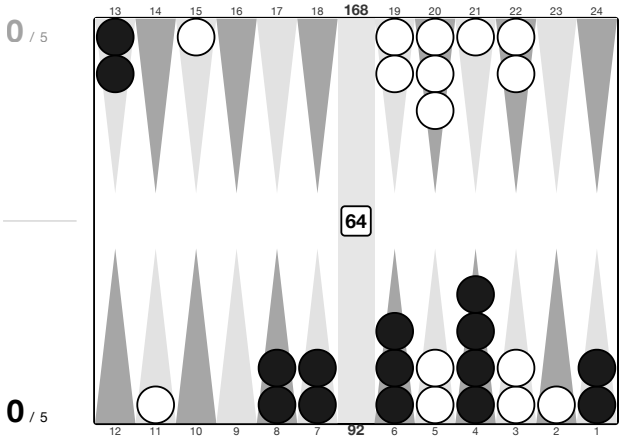
179



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

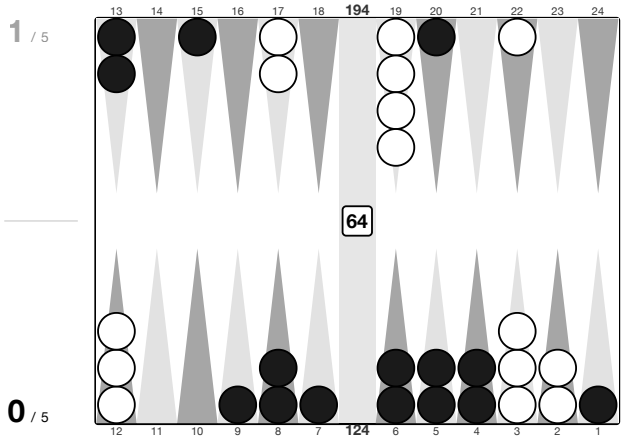
180



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

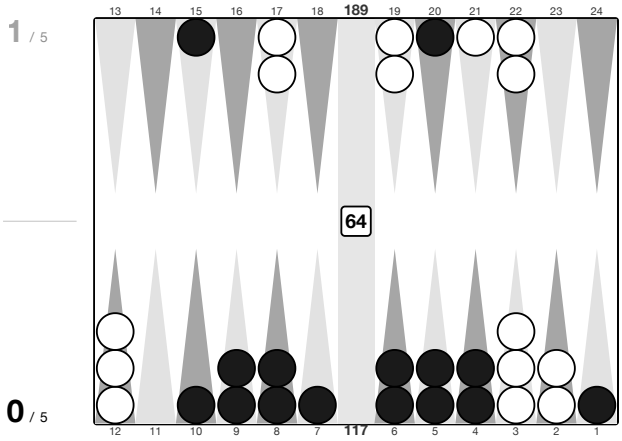
181



4A5A: Black on roll. Cube action?

(a) ND **(b)** DT

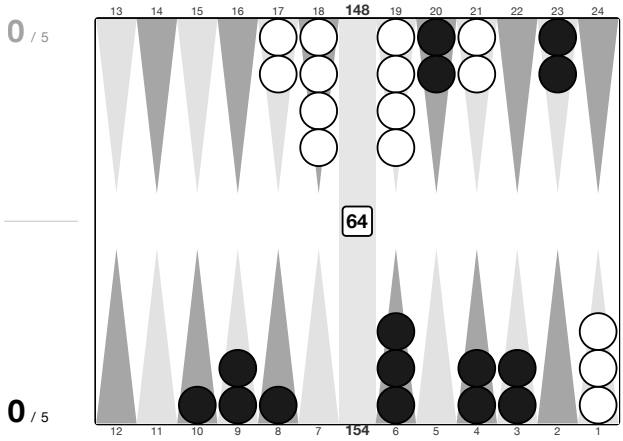
182



4A5A: Black on roll. Cube action?

(a) ND **(b)** DT

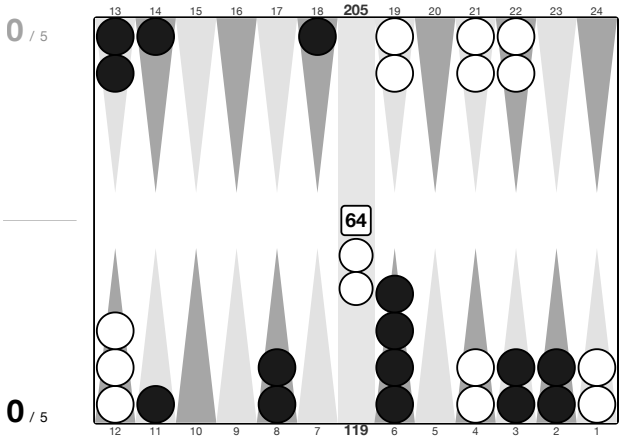
183



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

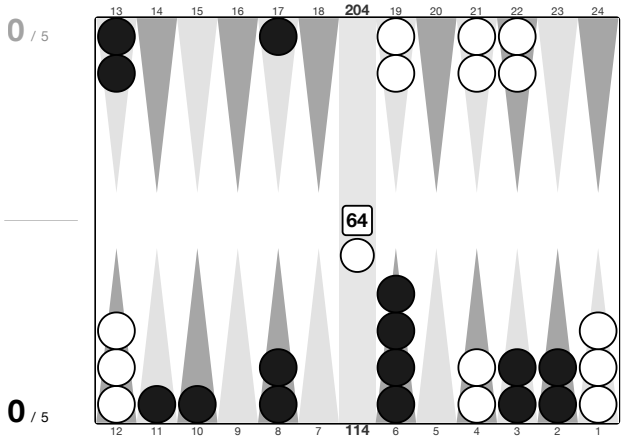
184



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

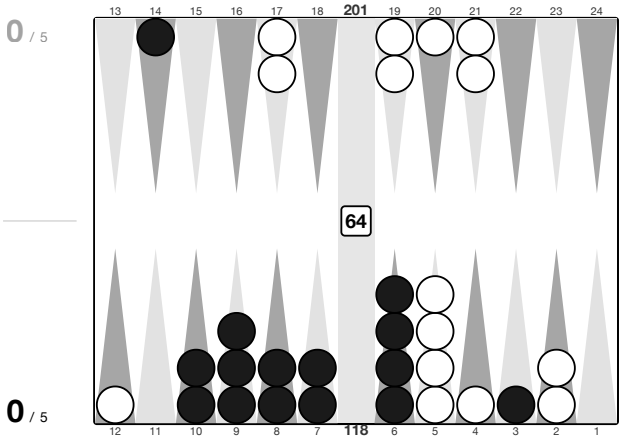
185



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

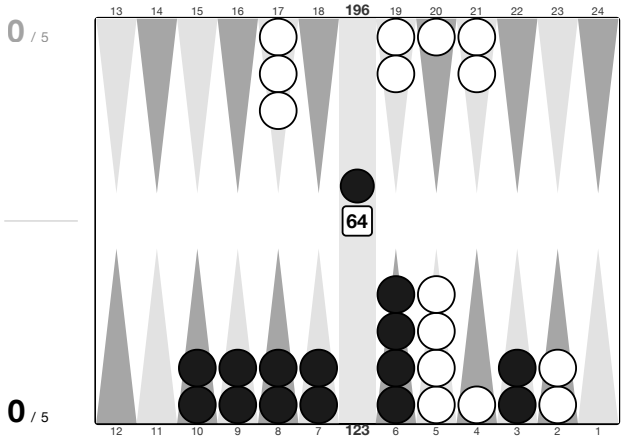
186



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

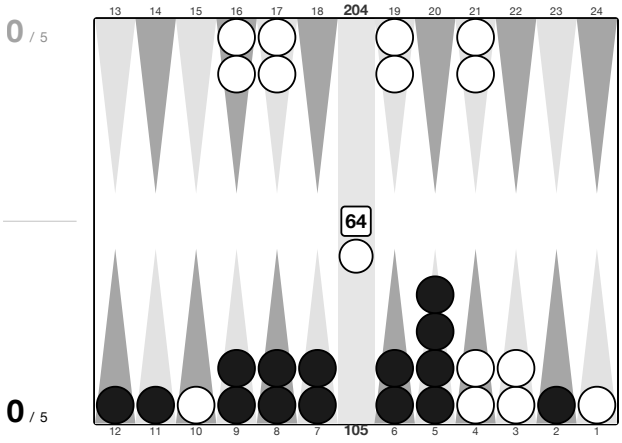
187



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

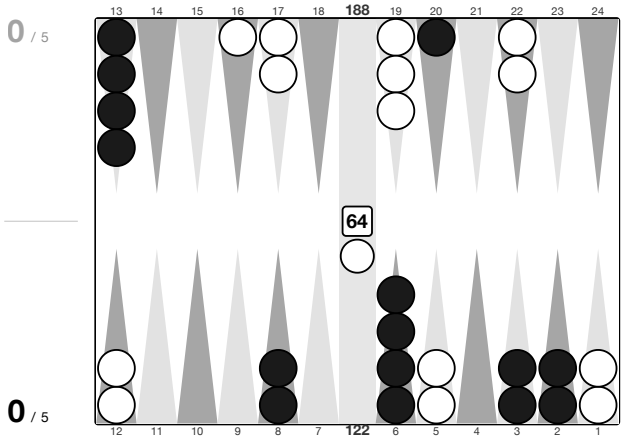
188



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

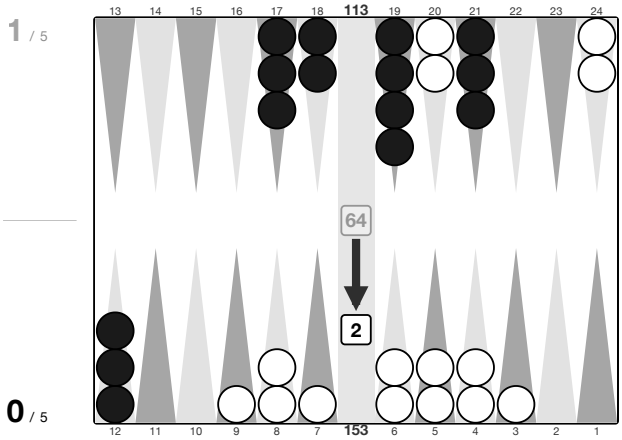
189



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

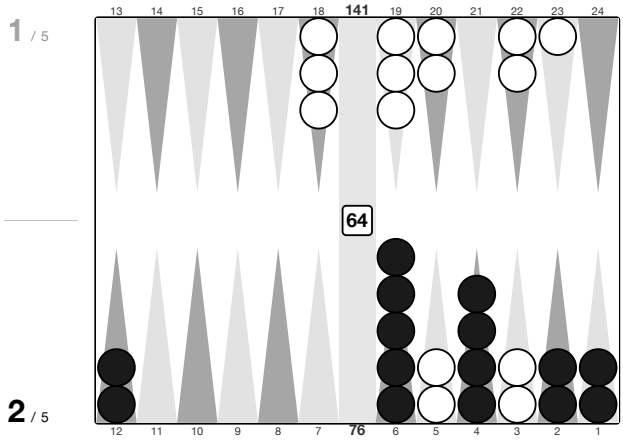
190



5A4A: Black doubles to 2. Take or pass?

(a) DT **(b)** DP

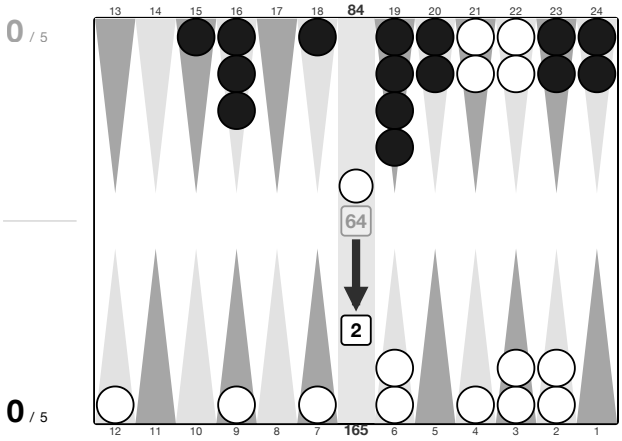
191



4A3A: Black on roll. Cube action?

(a) ND **(b)** DT

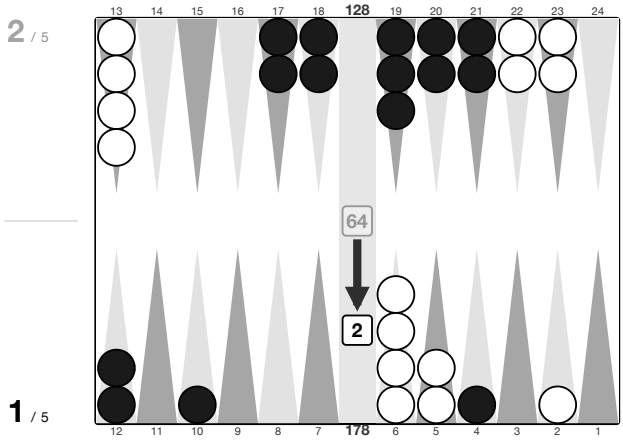
192



5A5A: Black doubles to 2. Take or pass?

(a) DT **(b)** DP

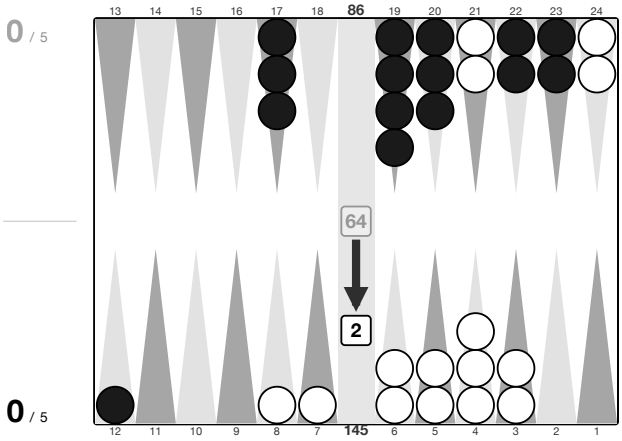
193



4A3A: Black doubles to 2. Take or pass?

(a) DT **(b)** DP

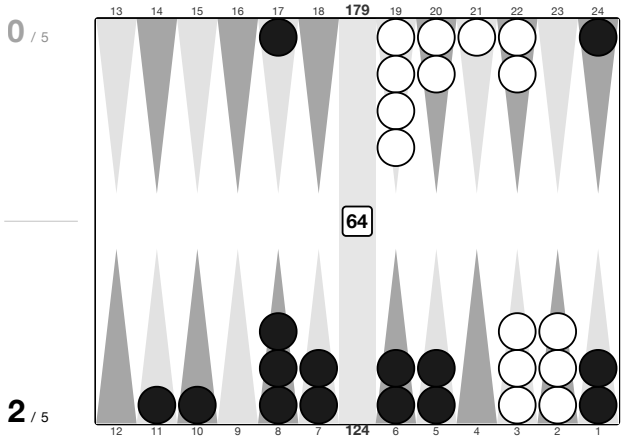
194



5A5A: Black doubles to 2. Take or pass?

(a) DT **(b)** DP

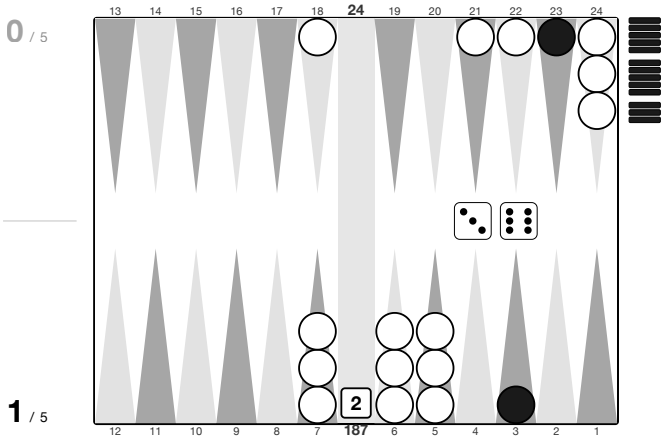
195



5A3A: Black on roll. Cube action?

(a) ND **(b)** DT

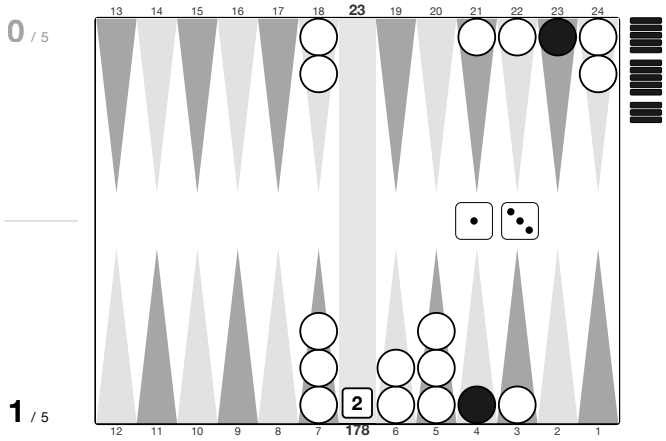
196



4A5A: White to play 63

(a) 24/18 6/3* **(b)** 24/21 22/16

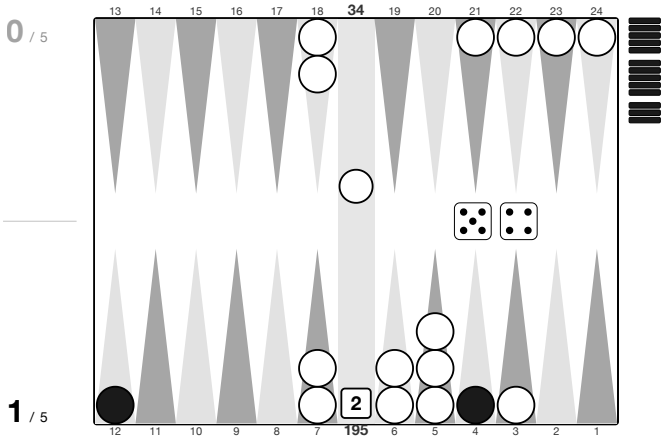
197



4A5A: White to play 31

(a) 7/4*/3 **(b)** 24/23* 7/4*

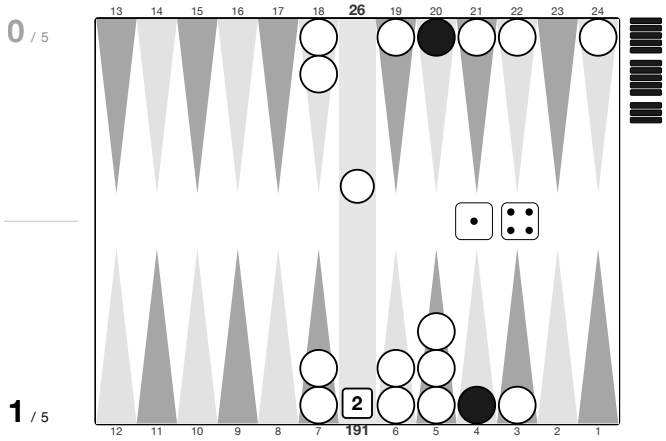
198



4A5A: White to play 54

(a) bar/21 23/18 **(b)** bar/20 23/19

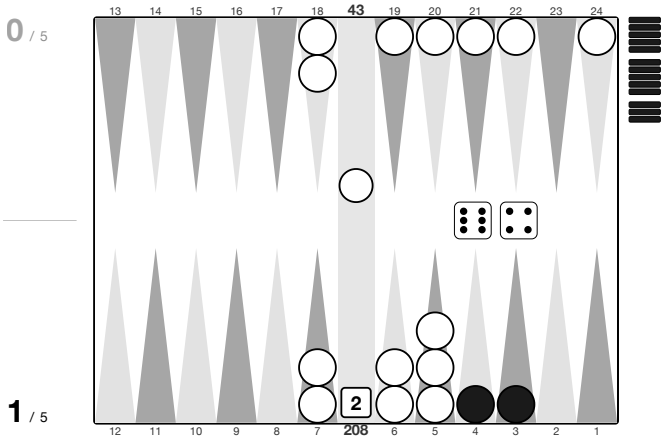
199



4A5A: White to play 41

(a) bar/24 7/3 **(b)** bar/20*

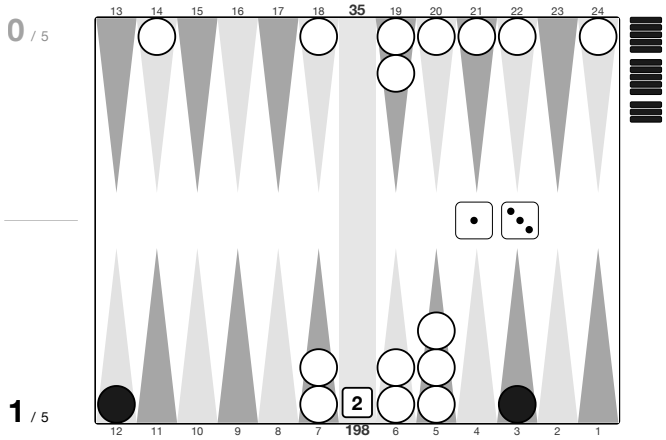
200



4A5A: White to play 64

(a) bar/21 24/18 **(b)** bar/19 18/14

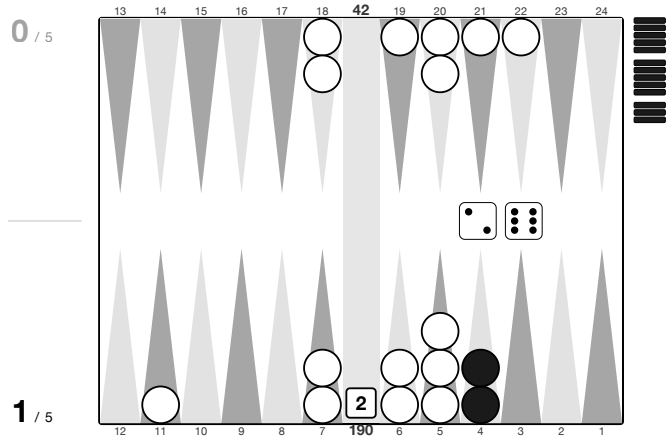
201



4A5A: White to play 31

(a) 19/18 14/11 **(b)** 20/17 18/17

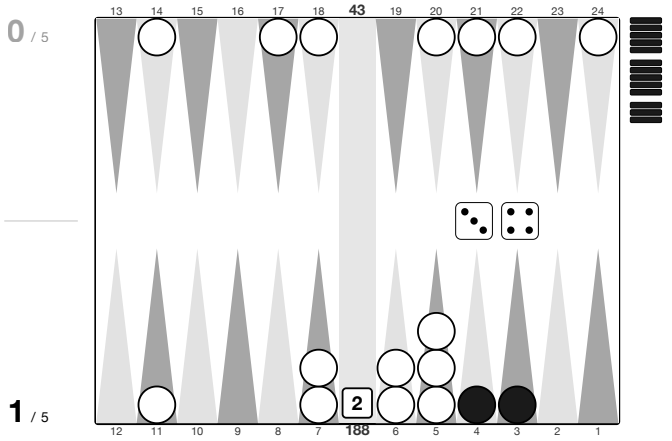
202



4A5A: White to play 62

(a) 18/16 11/5 **(b)** 20/14 19/17

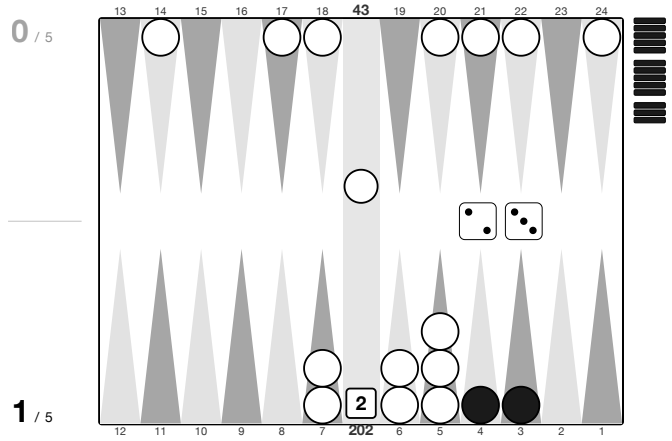
203



4A5A: White to play 43

(a) 11/4* **(b)** 18/11

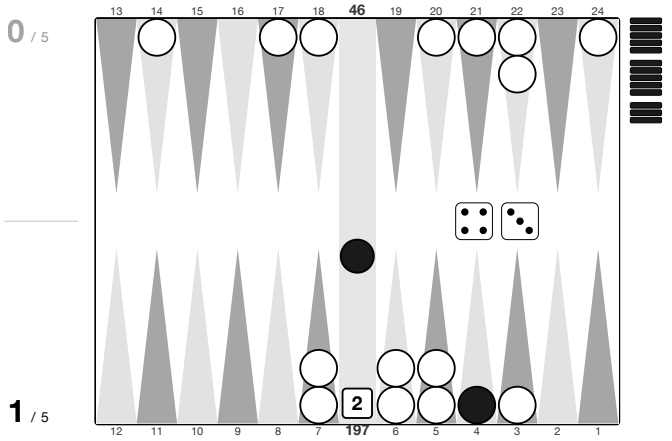
204



4A5A: White to play 32

(a) bar/22 24/22 **(b)** bar/22 5/3*

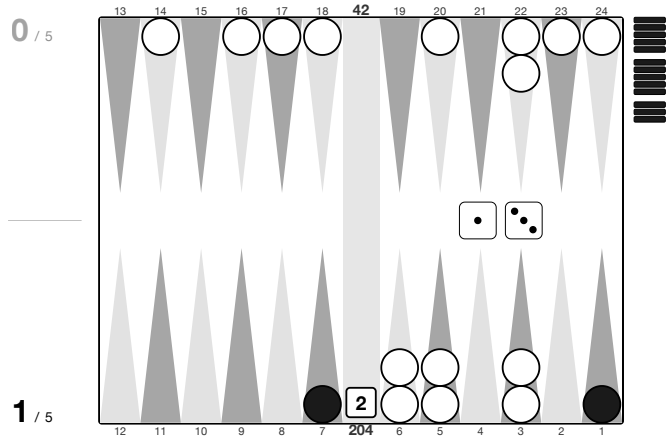
205



4A5A: White to play 43

(a) 21/17 20/17 **(b)** 7/4* 7/3

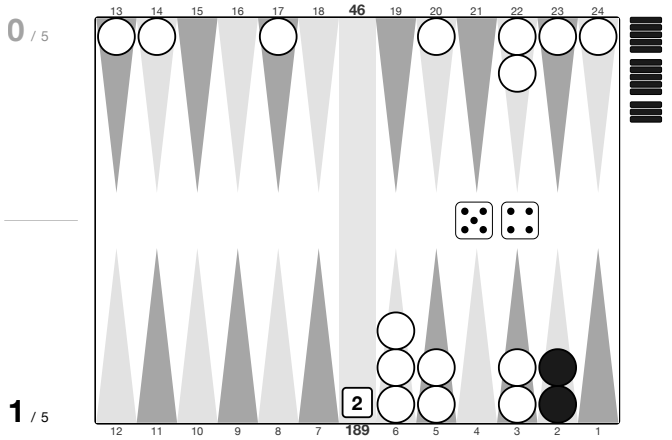
206



4A5A: White to play 31

(a) 18/14 **(b)** 23/22 20/17

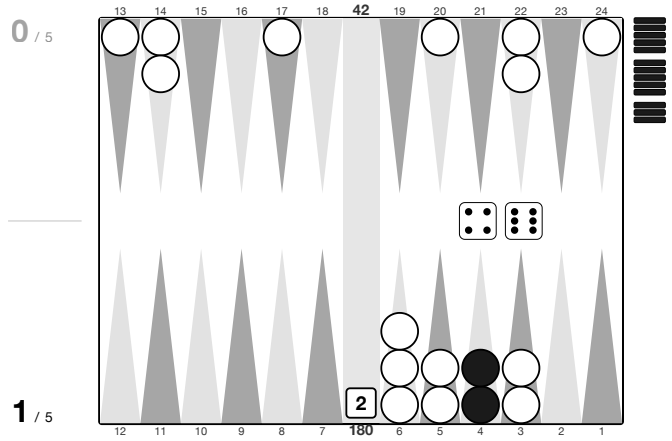
207



4A5A: White to play 54

(a) 14/5 **(b)** 23/14

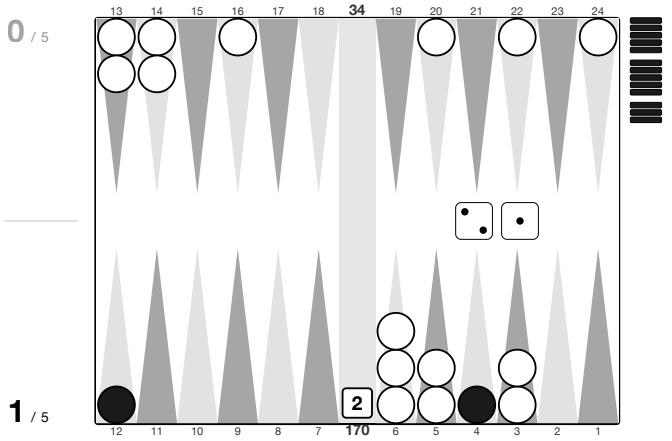
208



4A5A: White to play 64

(a) 24/18 17/13 **(b)** 22/16 17/13

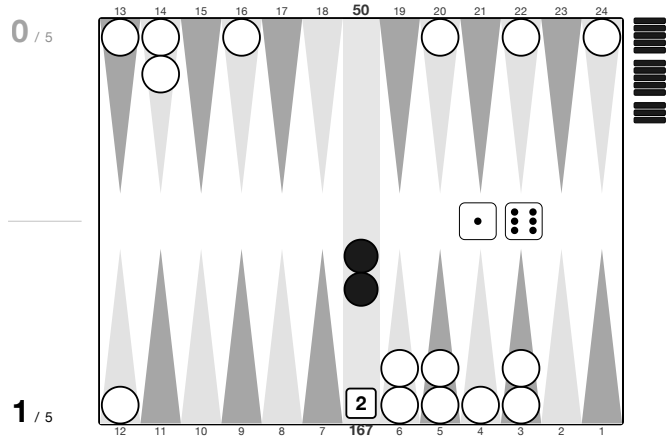
209



4A5A: White to play 21

(a) 14/13 14/12* **(b)** 13/12* 6/4*

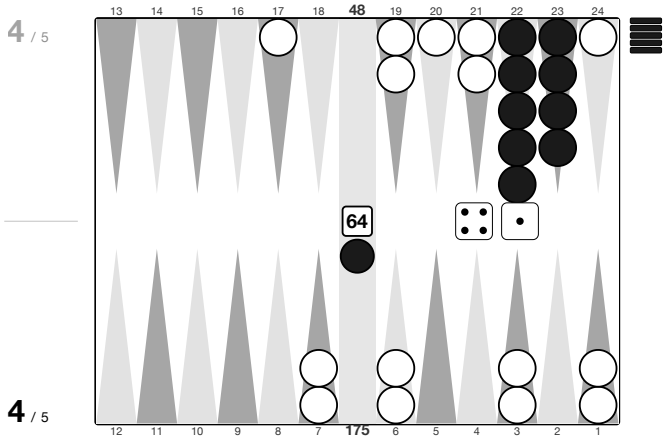
210



4A5A: White to play 61

(a) 12/6 4/3 **(b)** 14/8 13/12

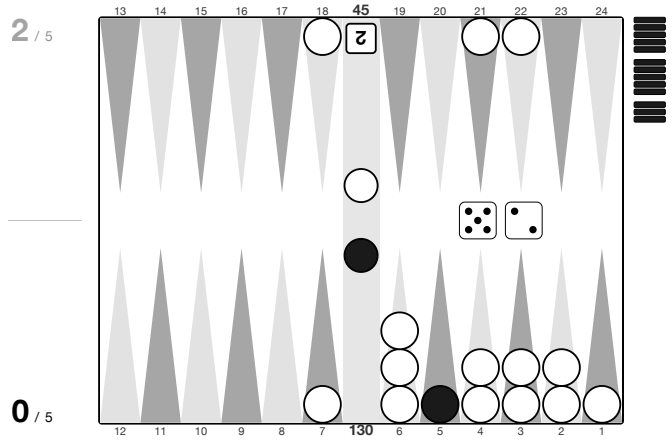
211



1A1A: White to play 41

(a) 21/20 21/17 **(b)** 19/14

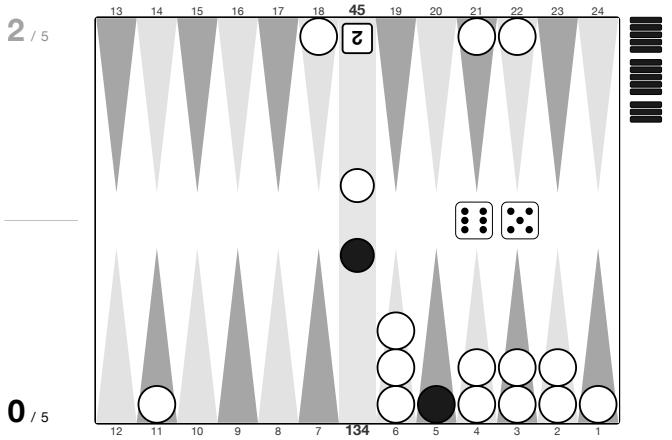
212



5A3A: White to play 52

(a) bar/20 7/5* **(b)** bar/23 6/1

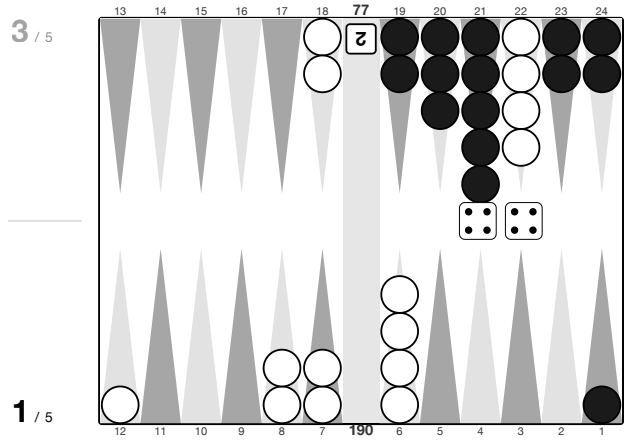
213



5A3A: White to play 65

(a) bar/19 6/1 **(b)** bar/20 11/5*

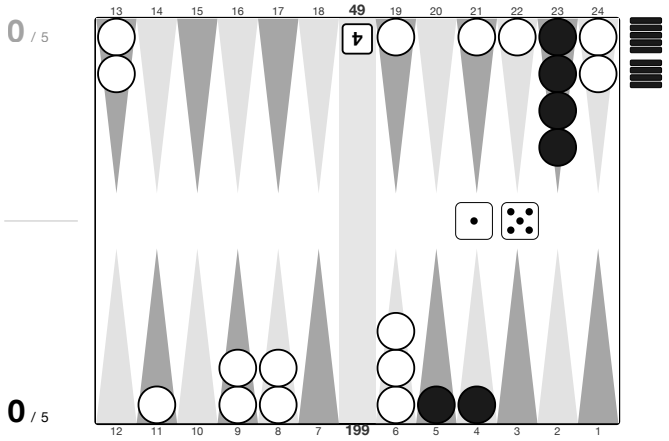
214



4A2A: White to play 44

(a) 22/14 18/14(2) **(b)** 18/10(2)

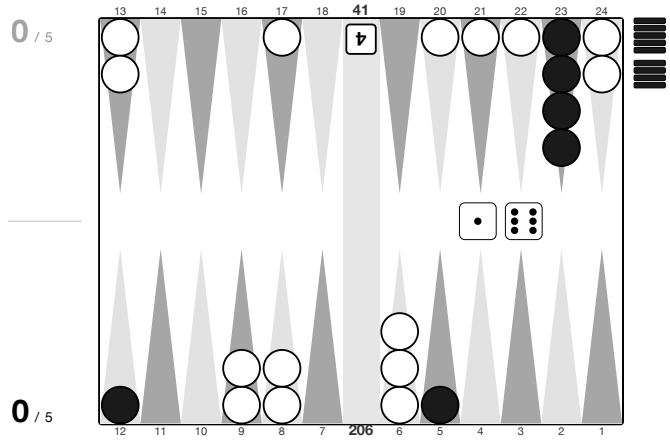
215



5A5A: White to play 51

(a) 11/5* **(b)** 22/21 11/6

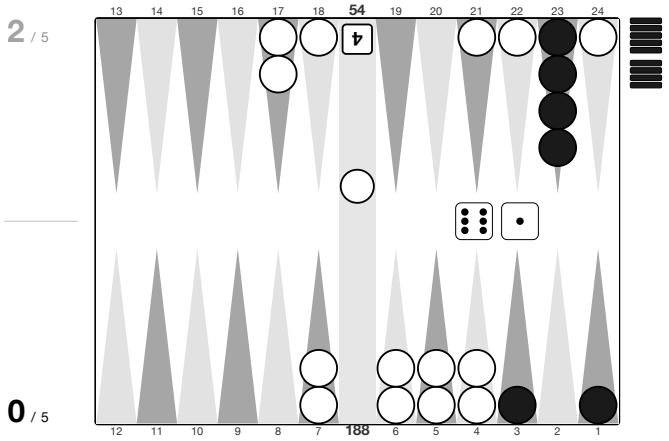
216



5A5A: White to play 61

(a) 20/14 13/12* **(b)** 13/12*/6

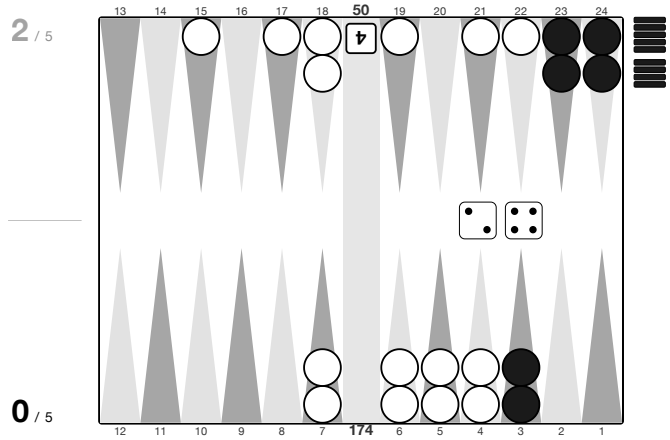
217



5A3A: White to play 61

(a) bar/24 21/15 **(b)** bar/18

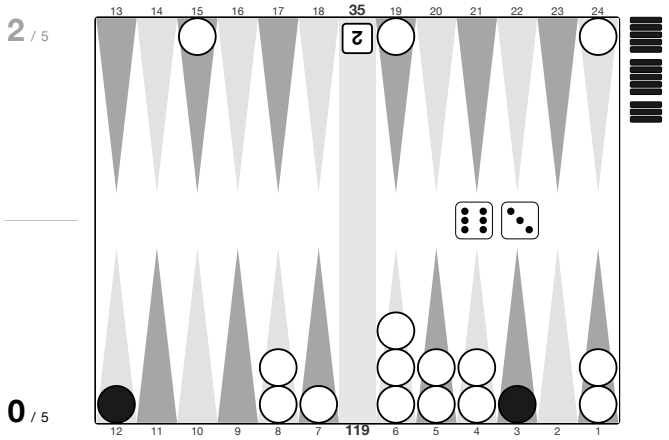
218



5A3A: White to play 42

(a) 22/18 17/15 **(b)** 19/13

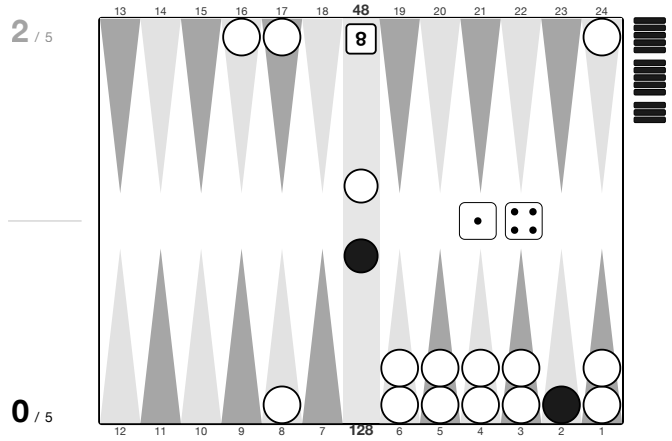
219



5A3A: White to play 63

(a) 15/9 6/3* **(b)** 15/12*/6

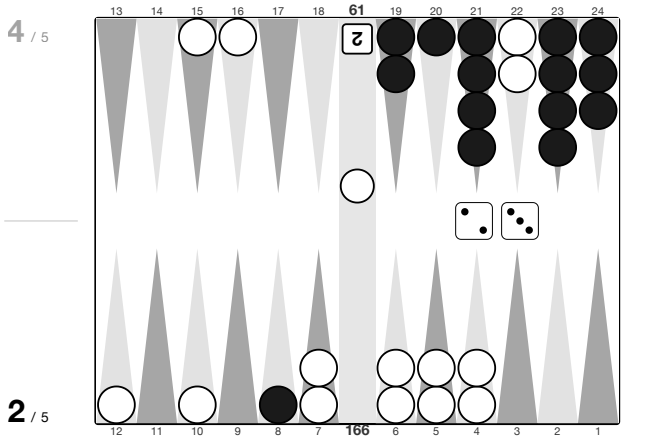
220



5A3A: White to play 41

(a) bar/21 3/2* **(b)** bar/24 16/12

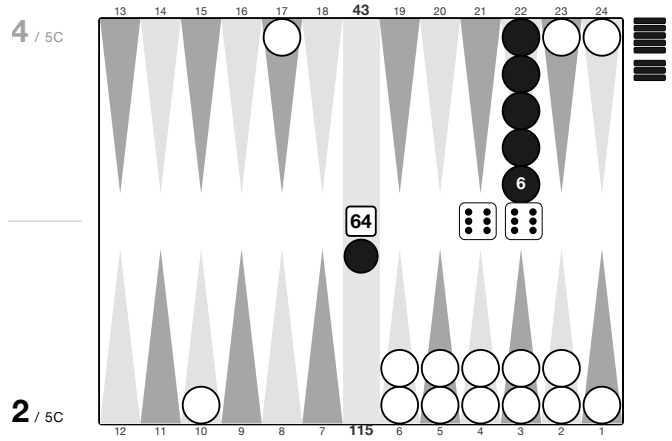
221



3A1A: White to play 32

(a) bar/22 10/8* **(b)** bar/20*

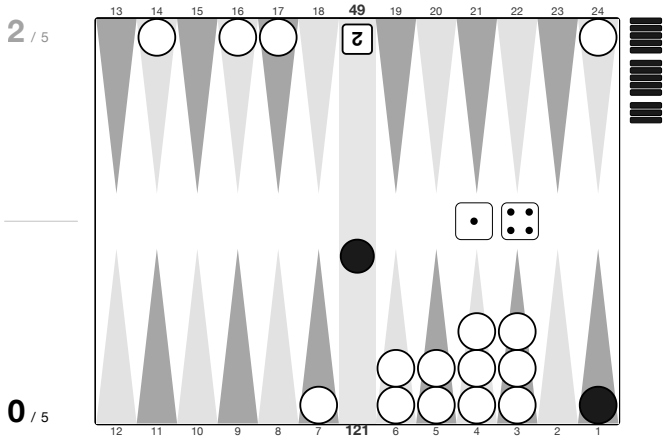
222



3A1AC: White to play 66

(a) 24/6 10/4 **(b)** 24/12 23/11

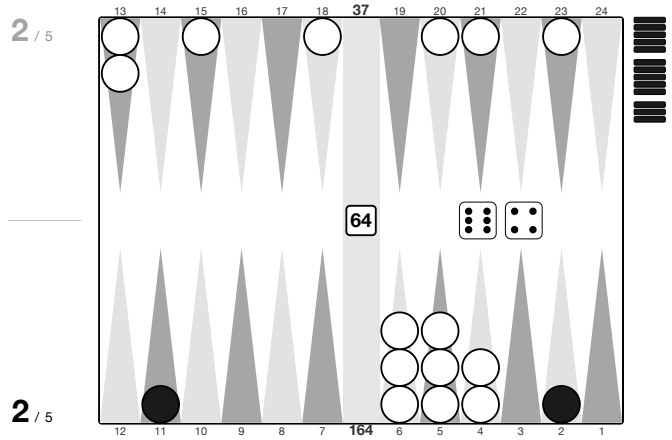
223



5A3A: White to play 41

(a) 16/12 3/2 **(b)** 16/12 7/6

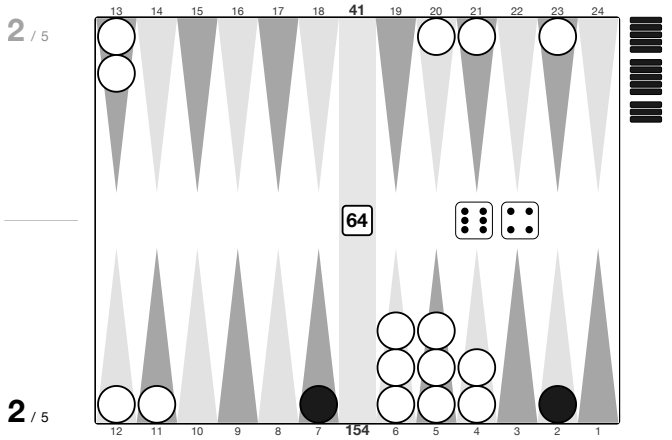
224



3A3A: White to play 64

(a) 18/12 15/11* **(b)** 15/11*/5

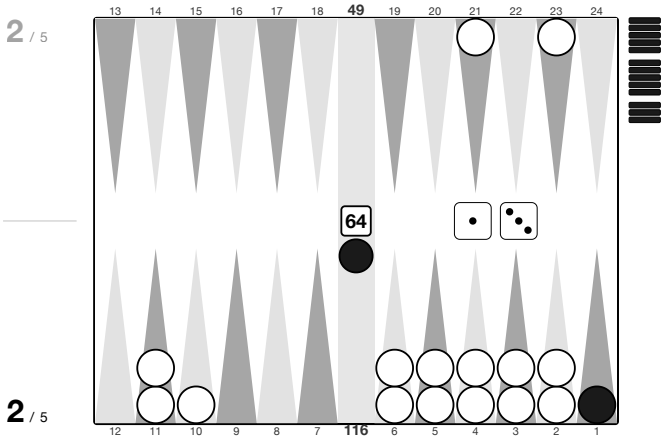
225



3A3A: White to play 64

(a) 12/6 11/7* **(b)** 13/7* 6/2*

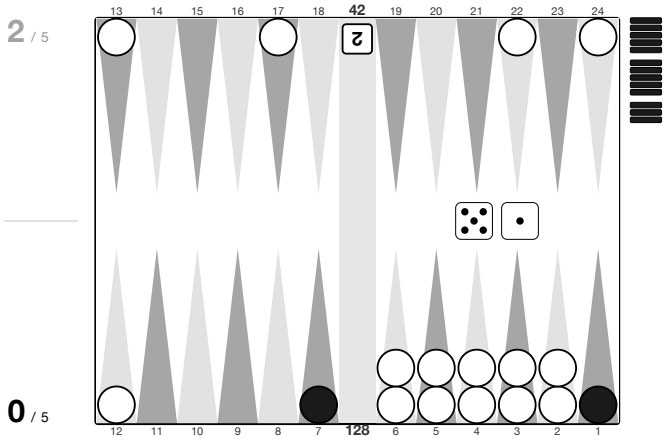
226



3A3A: White to play 31

(a) 10/7 2/1* **(b)** 10/6

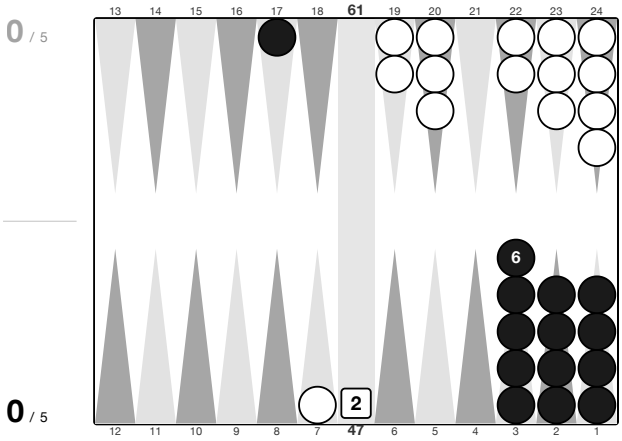
227



5A3A: White to play 51

(a) 12/7*/6 **(b)** 12/7* 2/1*

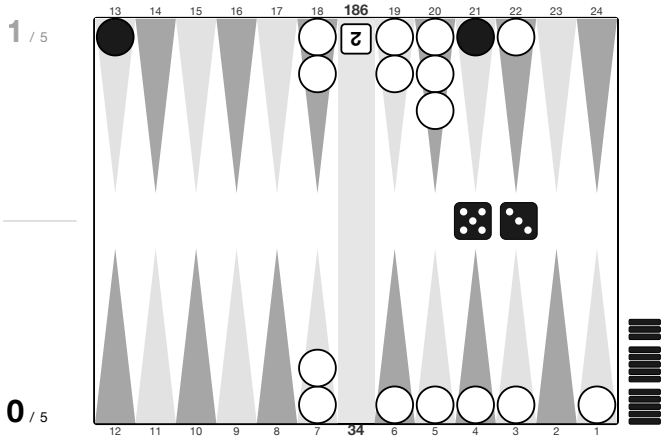
228



5A5A: Black on roll. Cube action?

(a) ND **(b)** DT

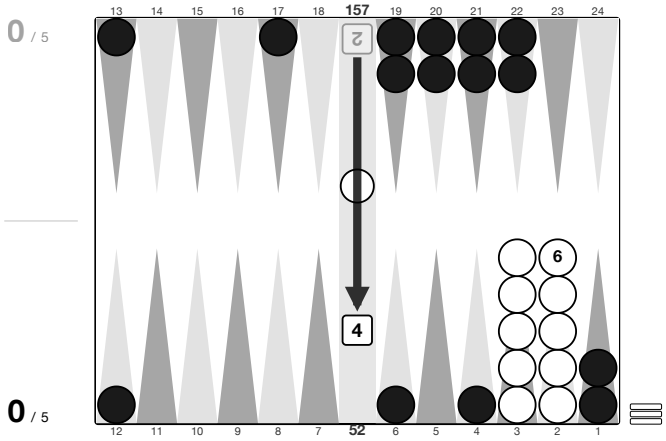
229



4A5A: Black to play 53

(a) 13/5* **(b)** 21/13

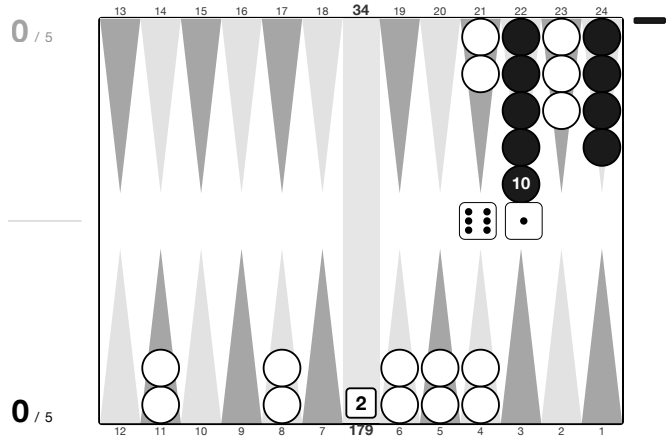
230



5A5A: Black doubles to 4. Take or pass?

(a) DT **(b)** DP

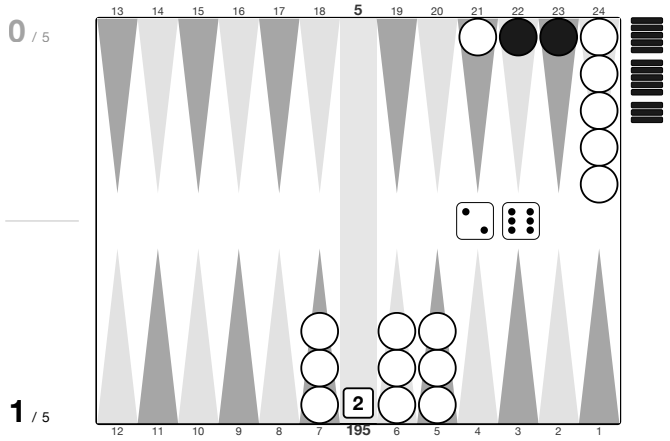
231



5A5A: White to play 61

(a) 23/17 11/10 **(b)** 23/17 21/20

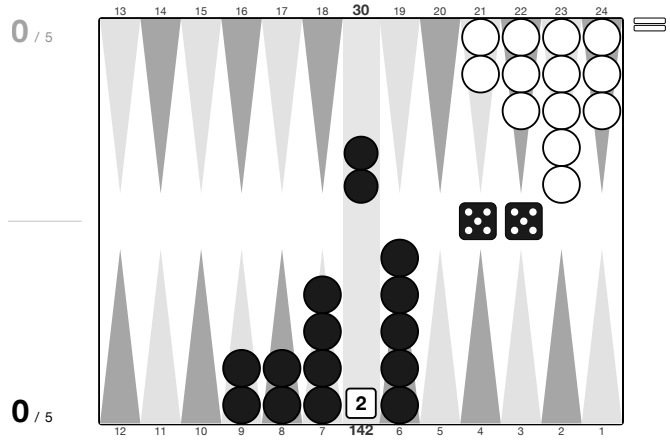
232



4A5A: White to play 62

(a) 24/22*/16 **(b)** 24/22* 24/18

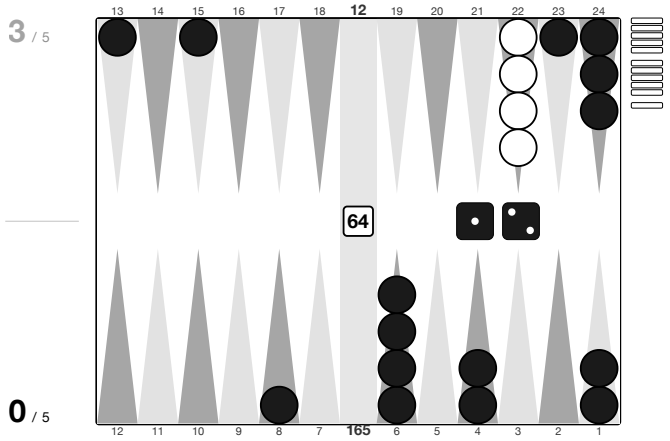
233



5A5A: Black to play 55

(a) bar/15 bar/20 9/4 **(b)** bar/15(2)

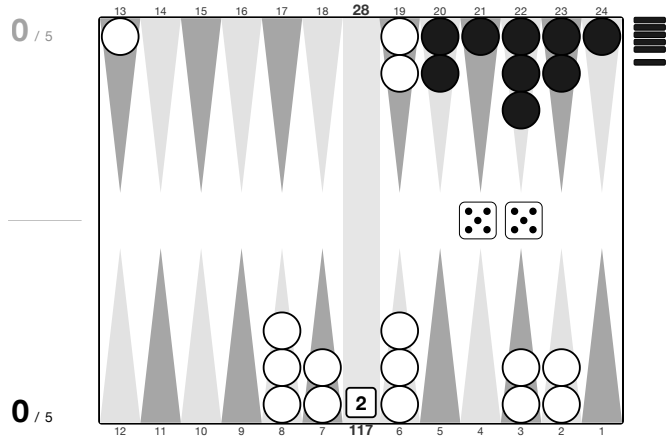
234



2A5A: Black to play 21

(a) 15/14 8/6 **(b)** 13/11 6/5

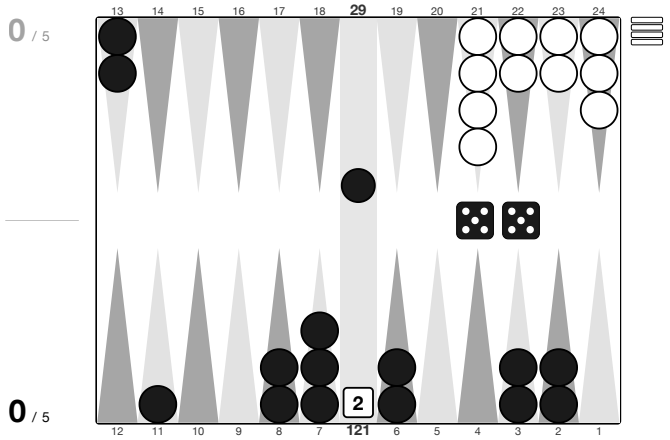
235



5A5A: White to play 55

(a) 19/9(2) **(b)** 19/4 8/3

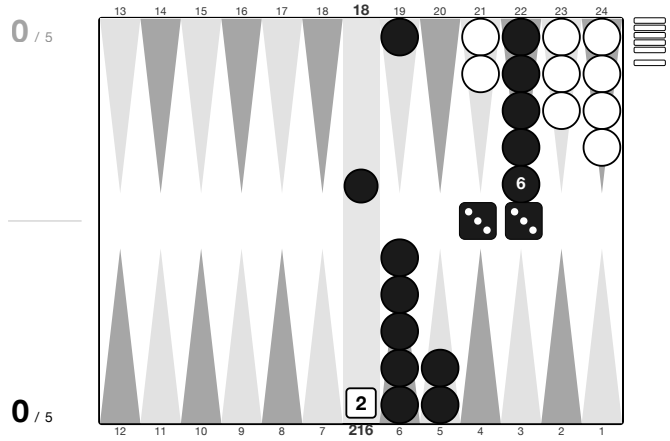
236



5A5A: Black to play 55

(a) bar/10 11/6 **(b)** bar/10 8/3

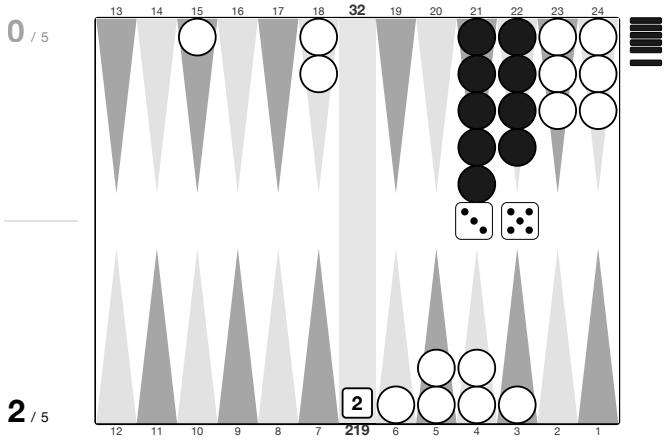
237



5A5A: Black to play 33

(a) bar/19 22/19(2) **(b)** bar/16 19/16

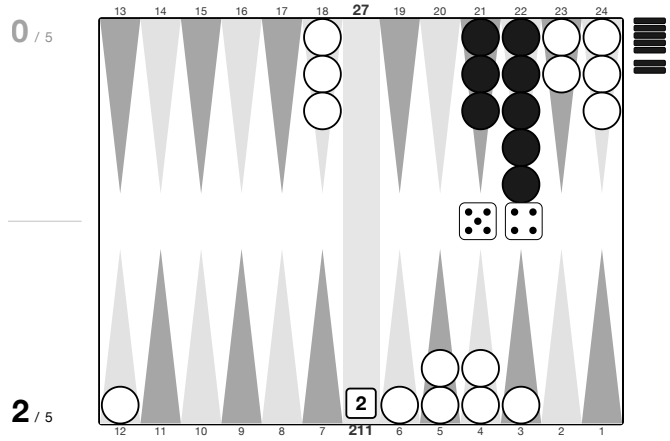
238



3A5A: White to play 53

(a) 23/18 15/12 **(b)** 23/18 6/3

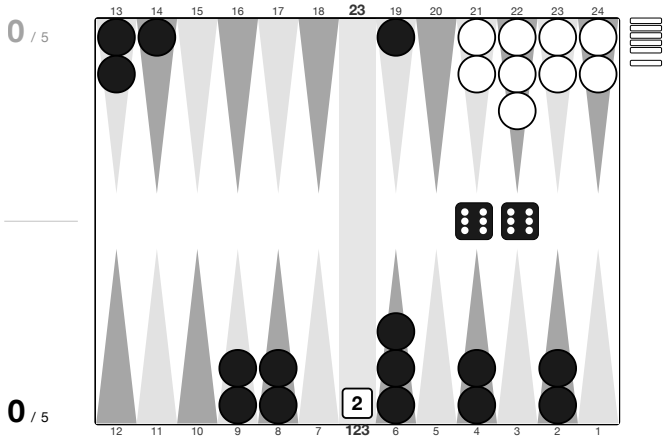
239



3A5A: White to play 54

(a) 18/9 **(b)** 12/3

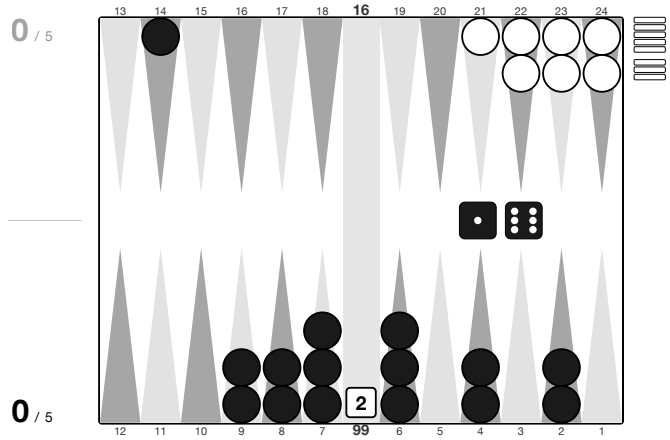
240



5A5A: Black to play 66

(a) 19/7 13/7(2) **(b)** 19/7 13/7 9/3

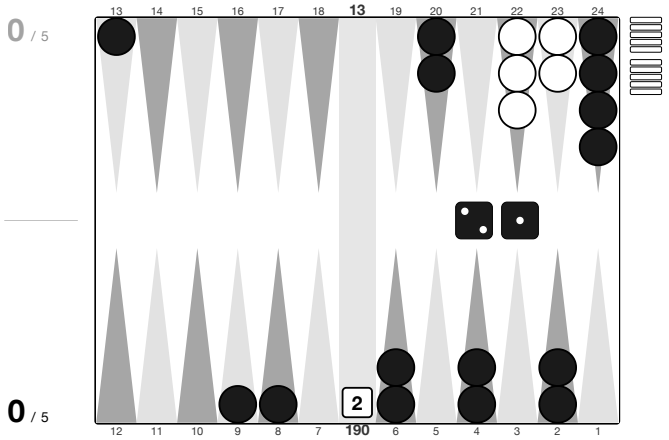
241



5A5A: Black to play 61

(a) 9/3 7/6 **(b)** 14/8 7/6

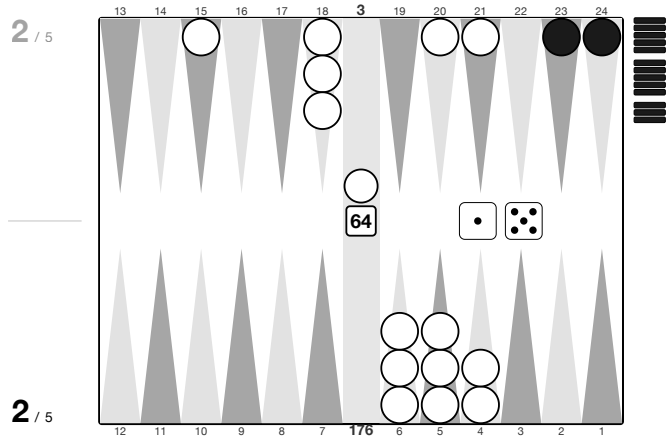
242



5A5A: Black to play 21

(a) 20/17 **(b)** 9/6

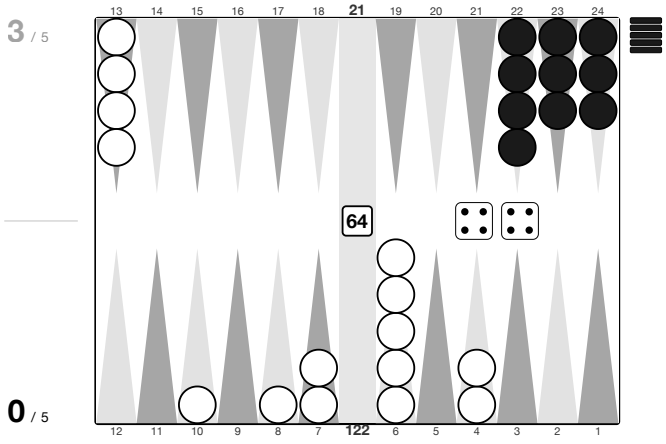
243



3A3A: White to play 51

(a) bar/24* 18/13 **(b)** bar/24* 20/15

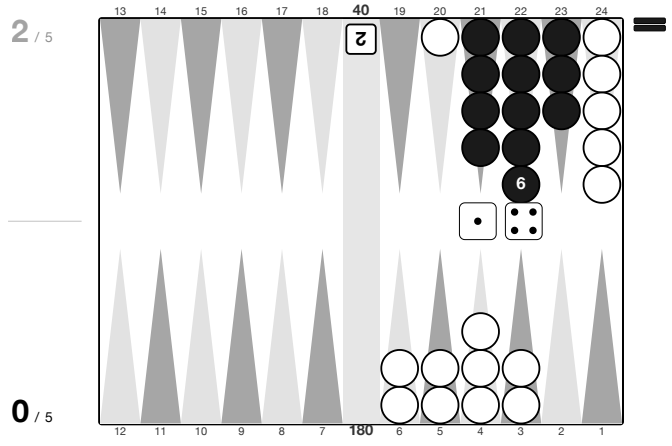
244



5A2A: White to play 44

(a) 13/9(4) **(b)** 13/9(2) 10/6 7/3

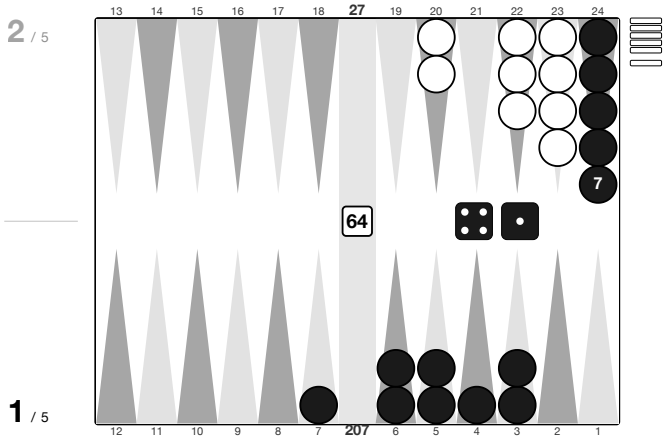
245



5A3A: White to play 41

(a) 24/20 4/3 **(b)** 24/19

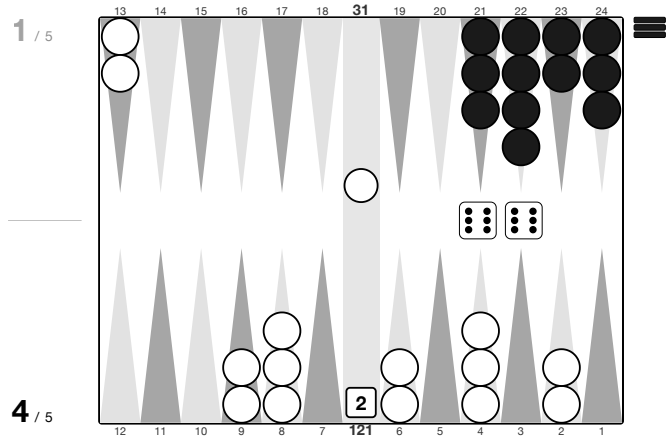
246



3A4A: Black to play 41

(a) 7/2 **(b)** 7/3 4/3

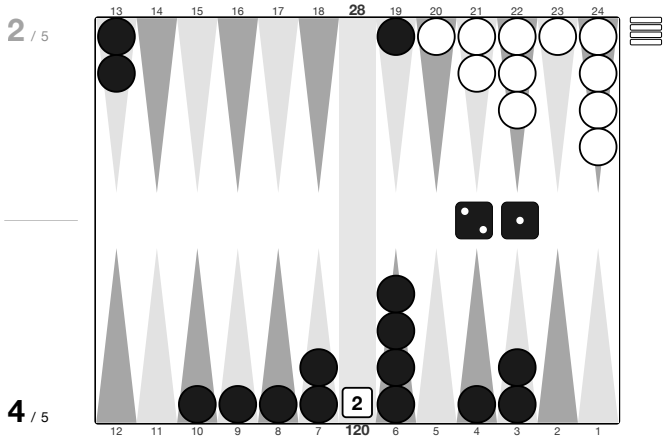
247



1A4A: White to play 66

(a) bar/7 13/7 **(b)** bar/19 13/7(2) 9/3

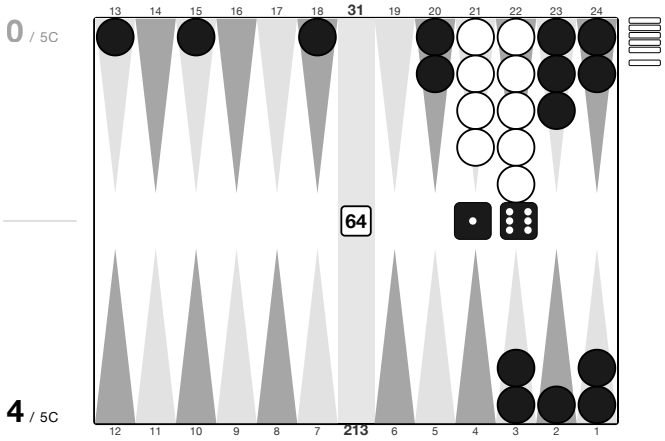
248



3A1A: Black to play 21

(a) 13/12 13/11 **(b)** 8/6 7/6

249



5A1AC: Black to play 61

(a) 23/17 2/1 **(b)** 23/17 13/12

HH is Colossus, the HedgeHog engine. Played names the engine that made the decision in the match and the choice it made; the other letter is the other engine's choice. Each engine's columns are its equity difference in favour of its own choice, at 2-, 3- and 4-ply. Match is the match, game and turn the position comes from.

A figure in *italics* was pruned during normal search: XG's move list did not carry the play to that depth, so it was valued on its own at that depth, the way XG values a candidate.

Middle game

							HH prefers its choice by			XG prefers its choice by					
No.	**Page**	**Away**	**Roll**	**(a)**	**(b)**	**Played**	2	3	4-ply	2	3	4-ply			**Match**
1	1	5A5A	61	22/15	15/9 5/4*	HH (b)	0.002	0.010	0.003	0.083	*0.067*	0.059	4010	g1	t8
2	1	5A5A	cube	ND	DT	XG (a)	0.083	0.041	0.029	0.017	0.021	0.016	366	g1	t4
3	1	5A5A	cube	ND	DT	XG (a)	0.117	0.048	0.032	0.002	0.028	0.019	563	g1	t5
4	1	4A5A	cube	ND	DT	XG (a)	0.108	0.061	0.046	0.005	0.010	0.008	1166	g2	t4
5	1	3A5A	cube	DT	DP	HH (b)	0.035	0.065	0.023	0.082	0.073	0.058	1182	g2	t7
6	1	5A5A	cube	ND	DT	XG (a)	0.090	0.056	0.041	0.006	0.013	0.011	1193	g1	t4
7	2	5A5A	cube	ND	DT	XG (a)	0.106	0.057	0.037	0.010	0.026	0.031	1661	g1	t8
8	2	5A5A	cube	ND	DT	XG (a)	0.085	0.033	0.023	0.012	0.032	0.027	1714	g1	t6
9	2	5A5A	cube	ND	DT	XG (a)	0.105	0.051	0.029	0.022	0.036	0.035	1751	g1	t11
10	2	5A5A	cube	ND	DT	XG (a)	0.118	0.030	0.024	0.012	0.035	0.038	2043	g1	t9
11	2	5A5A	cube	DT	DP	HH (b)	0.003	0.038	0.010	0.093	0.082	0.070	2079	g1	t6
12	2	5A5A	cube	ND	DT	XG (a)	0.098	0.065	0.048	0.003	0.004	0.005	2241	g1	t5
13	3	5A5A	cube	ND	DT	XG (a)	0.114	0.041	0.031	0.002	0.026	0.021	2248	g1	t6
14	3	5A5A	cube	ND	DT	XG (a)	0.098	0.054	0.040	0.021	0.031	0.032	2292	g1	t7
15	3	5A3A	cube	DT	DP	XG (a)	0.085	0.125	0.088	0.013	0.038	0.015	2315	g2	t6
16	3	5A5A	cube	ND	DT	XG (a)	0.084	0.038	0.036	0.014	0.030	0.024	2474	g1	t10
17	3	5A5A	cube	ND	DT	XG (a)	0.111	0.040	0.029	0.003	0.031	0.023	2944	g1	t6
18	3	5A5A	cube	ND	DT	XG (a)	0.095	0.064	0.059	0.014	0.022	0.003	3028	g1	t4
19	4	5A5A	cube	ND	DT	XG (a)	0.086	0.048	0.040	0.010	0.003	0.008	3750	g1	t8
20	4	5A5A	cube	ND	DT	XG (a)	0.105	0.062	0.043	0.005	0.021	0.003	3920	g1	t8
21	4	5A5A	cube	ND	DT	HH (b)	0.011	0.017	0.013	0.084	0.067	0.048	3940	g1	t10
22	4	5A5A	cube	ND	DT	XG (a)	0.091	0.058	0.043	0.014	0.013	0.013	4082	g1	t8
23	4	4A4A	cube	ND	DT	XG (a)	0.159	0.058	0.040	0.004	0.038	0.025	4246	g3	t8
24	4	5A5A	cube	ND	DT	XG (a)	0.114	0.033	0.027	0.000	0.038	0.028	4343	g1	t4
25	5	3A5A	cube	ND	DT	HH (a)	0.006	0.024	0.001	0.086	0.022	0.143	4603	g2	t20

Attacking

							HH prefers its choice by			XG prefers its choice by					
No.	**Page**	**Away**	**Roll**	**(a)**	**(b)**	**Played**	2	3	4-ply	2	3	4-ply			**Match**
26	6	5A3A	32	6/1	7/2	HH (b)	0.044	0.018	0.022	0.164	*0.033*	0.048	1002	g2	t34
27	6	1A1A	33	6/3*(2) 4/1*(2)	21/18 13/10(3)	HH (a)	0.020	0.014	0.015	0.110	0.112	0.100	1137	g5	t26
28	6	4A5A	44	22/18* 7/3 6/2(2)	22/18* 12/8 7/3 6/2	XG (b)	0.092	0.082	0.070	0.168	*0.008*	0.003	1458	g2	t27
29	6	3A2A	61	8/2 6/5	22/21* 7/1	HH (a)	0.022	0.034	0.006	0.120	0.043	0.031	2209	g5	t42
30	6	2A1AC	11	17/14* 12/11	13/11 3/1	HH (a)	0.025	0.005	0.005	0.086	*0.071*	*0.054*	2218	g4	t29
31	6	5A5A	52	bar/20 10/8	bar/23 8/3*	HH (b)	0.031	0.035	0.005	0.095	*0.090*	*0.075*	2460	g1	t42
32	7	4A1A	22	24/22 13/11 6/4*(2)	13/11(2) 6/4*/2	HH (a)	0.026	0.014	0.022	0.121	*0.038*	0.095	3042	g4	t76
33	7	5A3A	33	23/20 13/7 9/6	9/3(2)	HH (b)	0.154	0.112	0.100	0.143	*0.044*	*0.034*	4618	g2	t15
34	7	4A3A	cube	DP	TG	XG (b)	0.101	0.037	0.060	0.021	0.010	0.012	509	g3	t10
35	7	3A3A	cube	ND	DT	XG (a)	0.107	0.123	0.071	0.023	0.019	0.010	545	g3	t14
36	7	5A5A	cube	ND	DT	XG (a)	0.114	0.063	0.055	0.003	0.019	0.008	740	g1	t6
37	7	5A5A	cube	ND	DT	XG (a)	0.163	0.073	0.084	0.006	0.035	0.029	1066	g1	t25
38	8	3A5A	cube	ND	DT	HH (b)	0.126	0.113	0.053	0.265	0.265	0.265	1379	g2	t52
39	8	5A5A	cube	ND	DT	XG (a)	0.089	0.068	0.073	0.029	0.057	0.021	1580	g1	t22
40	8	5A5A	cube	ND	DT	XG (a)	0.083	0.032	0.028	0.049	0.052	0.040	1878	g1	t5
41	8	5A5A	cube	ND	DT	XG (a)	0.127	0.023	0.028	0.004	0.054	0.028	1906	g1	t7
42	8	5A5A	cube	ND	DT	XG (a)	0.112	0.077	0.065	0.046	0.048	0.044	1946	g1	t13
43	8	5A5A	cube	ND	DT	XG (a)	0.098	0.034	0.029	0.018	0.031	0.029	2242	g1	t3
44	9	5A5A	cube	ND	DT	XG (a)	0.138	0.068	0.057	0.009	0.017	0.017	2365	g1	t21
45	9	5A5A	cube	ND	DT	HH (b)	0.024	0.061	0.009	0.214	0.097	0.107	2389	g1	t27

46	9	5A5A	cube	ND	DT	XG (a)	0.103	0.058	0.047	0.060	0.048	0.047	2413	g1	t7
47	9	5A5A	cube	ND	DT	XG (a)	0.096	0.027	0.046	0.003	0.015	0.040	2414	g1	t29
48	9	4A5A	cube	ND	DT	XG (a)	0.111	0.077	0.092	0.054	0.036	0.004	2728	g2	t6
49	9	5A4A	cube	ND	DT	XG (a)	0.113	0.030	0.049	0.035	0.011	0.010	2884	g2	t27
50	10	5A5A	cube	ND	DT	XG (a)	0.095	0.080	0.068	0.033	0.011	0.014	2887	g1	t9
51	10	5A5A	cube	ND	DT	XG (a)	0.088	0.055	0.029	0.026	0.039	0.043	3011	g1	t8
52	10	5A5A	cube	ND	DT	XG (a)	0.101	0.036	0.027	0.018	0.033	0.029	3070	g1	t11
53	10	5A5A	cube	ND	DT	XG (a)	0.124	0.095	0.084	0.004	0.014	0.001	3126	g1	t18
54	10	3A2A	cube	DT	DP	HH (a)	0.164	0.081	0.152	0.160	0.083	0.067	3519	g4	t40
55	10	5A5A	cube	ND	DT	XG (a)	0.100	0.032	0.022	0.025	0.052	0.057	3723	g1	t8
56	11	3A3A	cube	ND	DT	HH (b)	0.016	0.016	0.015	0.085	0.057	0.049	3822	g3	t9
57	11	5A5A	cube	ND	DT	XG (a)	0.112	0.045	0.051	0.007	0.049	0.008	3936	g1	t42
58	11	5A3A	cube	ND	DT	HH (b)	0.063	0.017	0.039	0.084	0.038	0.052	4123	g2	t19
59	11	5A5A	cube	ND	DT	XG (a)	0.099	0.086	0.073	0.039	0.045	0.008	4482	g1	t6
60	11	5A5A	cube	ND	DT	HH (b)	0.050	0.028	0.025	0.108	0.092	0.065	4538	g1	t30
61	11	5A5A	cube	ND	DT	XG (a)	0.082	0.052	0.037	0.055	0.063	0.042	4826	g1	t9

Facing a blitz

							HH prefers its choice by			XG prefers its choice by					
No.	**Page**	**Away**	**Roll**	**(a)**	**(b)**	**Played**	2	3	4-ply	2	3	4-ply		**Match**	
62	12	5A5A	41	bar/24 6/2	bar/21 24/23	XG (b)	0.091	0.077	0.074	0.011	0.016	0.005	3596	g1	t9
63	12	5A5A	41	bar/21 2/1	bar/24 13/9	XG (a)	0.092	0.052	0.072	0.039	0.046	0.001	3802	g1	t15
64	12	4A3A	11	bar/24* 8/7 3/2(2)	bar/24* 8/7 3/1	XG (b)	0.117	0.052	0.028	0.222	0.199	0.152	3840	g3	t24
65	12	5A5A	cube	DT	DP	HH (b)	0.027	0.137	0.096	0.111	0.038	0.037	95	g1	t13
66	12	3A5A	cube	DT	DP	HH (b)	0.030	0.086	0.030	0.095	0.080	0.064	184	g2	t9
67	12	3A5A	cube	DT	DP	HH (b)	0.023	0.024	0.023	0.106	0.059	0.076	309	g2	t14
68	13	5A5A	cube	DT	DP	HH (b)	0.005	0.065	0.029	0.092	0.108	0.077	492	g1	t9
69	13	5A5A	cube	DT	DP	XG (a)	0.082	0.084	0.107	0.187	0.199	0.114	667	g1	t19
70	13	5A4A	cube	ND	DT	HH (b)	0.027	0.072	0.026	0.086	0.048	0.034	737	g2	t13
71	13	5A5A	cube	DT	DP	XG (a)	0.118	0.131	0.129	0.083	0.019	0.025	759	g1	t11
72	13	5A4A	cube	DT	DP	XG (a)	0.083	0.167	0.105	0.070	0.020	0.023	862	g2	t16
73	13	5A5A	cube	ND	DT	HH (b)	0.035	0.056	0.034	0.098	0.060	0.039	906	g1	t13
74	14	5A5A	cube	DT	DP	HH (b)	0.089	0.075	0.076	0.096	0.069	0.063	1110	g1	t10
75	14	5A5A	cube	DT	DP	HH (b)	0.038	0.043	0.073	0.154	0.154	0.050	1163	g1	t21
76	14	5A5A	cube	DT	DP	XG (a)	0.241	0.172	0.187	0.055	0.057	0.028	1351	g1	t9
77	14	5A3A	cube	DT	DP	XG (a)	0.089	0.132	0.096	0.010	0.025	0.018	1538	g2	t10
78	14	5A5A	cube	DT	DP	XG (a)	0.124	0.081	0.105	0.048	0.055	0.029	1769	g1	t13
79	14	5A5A	cube	ND	DT	XG (a)	0.106	0.085	0.097	0.042	0.017	0.010	1879	g1	t35
80	15	5A5A	cube	DT	DP	HH (b)	0.005	0.041	0.026	0.111	0.101	0.120	1993	g1	t34
81	15	5A5A	cube	ND	DT	XG (a)	0.097	0.061	0.039	0.012	0.033	0.013	2405	g1	t13
82	15	5A5A	cube	DT	DP	HH (b)	0.094	0.121	0.094	0.151	0.181	0.094	2583	g1	t10
83	15	5A5A	cube	DT	DP	HH (b)	0.067	0.061	0.067	0.088	0.061	0.069	2709	g1	t8
84	15	4A5A	cube	DT	DP	HH (b)	0.035	0.044	0.036	0.125	0.095	0.079	2794	g2	t7
85	15	3A3A	cube	DT	DP	HH (b)	0.028	0.048	0.016	0.087	0.021	0.056	2977	g3	t10
86	16	5A5A	cube	DT	DP	XG (a)	0.139	0.150	0.139	0.025	0.044	0.009	3225	g1	t17
87	16	3A4A	cube	ND	DT	HH (b)	0.043	0.025	0.028	0.087	0.061	0.044	3367	g4	t10
88	16	4A5A	cube	DT	DP	HH (b)	0.014	0.044	0.009	0.116	0.146	0.148	3399	g2	t25
89	16	3A3A	cube	DT	DP	HH (b)	0.045	0.049	0.041	0.084	0.069	0.048	3489	g4	t20
90	16	5A5A	cube	DT	DP	HH (b)	0.058	0.068	0.069	0.138	0.090	0.095	3578	g1	t18
91	16	5A5A	cube	ND	DT	XG (a)	0.099	0.065	0.058	0.009	0.032	0.011	3658	g1	t10
92	17	5A5A	cube	DT	DP	XG (a)	0.089	0.091	0.061	0.048	0.118	0.085	3857	g1	t13
93	17	5A3A	cube	DT	DP	XG (a)	0.126	0.089	0.104	0.064	0.117	0.057	3943	g2	t13
94	17	5A5A	cube	DT	DP	HH (b)	0.021	0.106	0.033	0.115	0.112	0.096	4011	g1	t10
95	17	5A5A	cube	DT	DP	HH (b)	0.082	0.089	0.080	0.102	0.084	0.077	4070	g1	t14
96	17	5A5A	cube	DT	DP	HH (b)	0.004	0.052	0.002	0.119	0.105	0.106	4425	g1	t8
97	17	5A5A	cube	DT	DP	XG (a)	0.146	0.118	0.131	0.007	0.034	0.004	4584	g1	t18
98	18	4A5A	cube	DT	DP	HH (b)	0.032	0.062	0.038	0.156	0.054	0.087	4920	g2	t36

Priming battles

							HH prefers its choice by			XG prefers its choice by					
No.	**Page**	**Away**	**Roll**	**(a)**	**(b)**	**Played**	2	3	4-ply	2	3	4-ply			**Match**
99	19	1A1A	52	8/1*	8/3 6/4	HH (a)	0.008	0.004	0.008	0.083	0.028	0.033	867	g5	t41
100	19	5A5A	62	24/16	24/22 7/1*	HH (b)	0.038	0.007	0.020	0.083	0.119	0.119	1140	g1	t52
101	19	5A5A	63	13/7 5/2*	24/18 5/2*	XG (b)	0.080	0.046	0.051	0.043	0.009	0.015	1317	g1	t9
102	19	3A3A	44	11/7 8/4(3)	11/7 8/4 6/2(2)	HH (b)	0.048	0.013	0.021	0.083	*0.034*	0.030	1571	g3	t19
103	19	5A5A	55	20/15(2) 8/3*(2)	8/3*(2) 7/2(2)	HH (b)	0.012	0.019	0.008	0.192	*0.037*	*0.028*	2603	g1	t35
104	19	5A5A	55	20/15(2) 7/2(2)	20/10 20/15 13/8	HH (a)	0.076	0.039	0.032	0.105	*0.053*	*0.030*	2754	g1	t31
105	20	5A5A	11	20/19*(3) 7/6	20/19* 7/5 6/5	HH (a)	0.016	0.097	0.046	1.638	*0.399*	*0.710*	4819	g1	t24
106	20	5A5A	51	21/16 8/7*	13/7*	HH (a)	0.095	0.054	0.050	0.088	*0.051*	0.057	4851	g1	t19
107	20	4A5A	42	13/11 6/2*	10/8 6/2*	HH (b)	0.010	0.003	0.006	0.089	*0.066*	0.040	4885	g2	t9
108	20	4A5A	cube	ND	DT	XG (a)	0.103	0.055	0.033	0.014	0.027	0.024	91	g2	t5
109	20	3A4A	cube	ND	DT	HH (b)	0.034	0.070	0.031	0.134	0.080	0.074	104	g3	t21
110	20	5A5A	cube	ND	DT	HH (b)	0.034	0.037	0.026	0.109	0.078	0.064	115	g1	t12
111	21	5A5A	cube	ND	DT	XG (a)	0.094	0.040	0.023	0.034	0.057	0.045	176	g1	t7
112	21	4A5A	cube	ND	DT	XG (a)	0.099	0.049	0.030	0.001	0.037	0.021	554	g2	t11
113	21	5A5A	cube	DT	DP	XG (a)	0.107	0.142	0.114	0.035	0.019	0.007	582	g1	t10
114	21	5A5A	cube	ND	DT	XG (a)	0.088	0.048	0.023	0.016	0.032	0.031	858	g1	t8
115	21	5A5A	cube	ND	DT	XG (a)	0.102	0.071	0.054	0.014	0.010	0.009	957	g1	t6
116	21	5A5A	cube	ND	DT	XG (a)	0.117	0.038	0.048	0.048	0.069	0.036	1115	g1	t13
117	22	4A5A	cube	ND	DT	XG (a)	0.142	0.067	0.049	0.012	0.036	0.014	1117	g2	t9
118	22	5A4A	cube	ND	DT	HH (b)	0.049	0.076	0.080	0.118	0.040	0.045	1134	g2	t12
119	22	5A5A	cube	ND	DT	XG (a)	0.089	0.034	0.036	0.010	0.035	0.021	1426	g1	t8
120	22	5A5A	cube	ND	DT	XG (a)	0.094	0.042	0.027	0.008	0.042	0.024	1498	g1	t7
121	22	5A4A	cube	ND	DT	XG (a)	0.103	0.041	0.046	0.015	0.057	0.004	1570	g2	t10
122	22	5A5A	cube	ND	DT	XG (a)	0.113	0.034	0.024	0.015	0.036	0.031	2073	g1	t4
123	23	5A5A	cube	ND	DT	XG (a)	0.081	0.044	0.022	0.011	0.036	0.020	2738	g1	t6
124	23	3A5A	cube	DT	DP	HH (b)	0.027	0.048	0.011	0.098	0.080	0.096	2787	g2	t14
125	23	5A5A	cube	ND	DT	XG (a)	0.092	0.066	0.056	0.018	0.028	0.025	2872	g1	t8
126	23	5A5A	cube	ND	DT	XG (a)	0.089	0.026	0.020	0.045	0.065	0.034	3275	g1	t11
127	23	5A5A	cube	ND	DT	XG (a)	0.109	0.035	0.025	0.001	0.014	0.018	3646	g1	t7
128	23	5A5A	cube	ND	DT	XG (a)	0.081	0.028	0.029	0.019	0.042	0.013	3828	g1	t29
129	24	5A5A	cube	ND	DT	XG (a)	0.081	0.057	0.041	0.030	0.014	0.005	3902	g1	t6
130	24	5A5A	cube	ND	DT	XG (a)	0.103	0.034	0.021	0.015	0.037	0.037	3910	g1	t5
131	24	5A5A	cube	ND	DT	XG (a)	0.086	0.044	0.022	0.006	0.018	0.024	3965	g1	t10
132	24	5A5A	cube	DT	DP	HH (b)	0.004	0.080	0.040	0.129	0.086	0.073	4111	g1	t15
133	24	5A5A	cube	ND	DT	XG (a)	0.088	0.041	0.021	0.011	0.030	0.024	4305	g1	t18
134	24	5A5A	cube	ND	DT	XG (a)	0.082	0.038	0.026	0.000	0.041	0.031	4621	g1	t9
135	25	5A5A	cube	ND	DT	XG (a)	0.096	0.082	0.056	0.004	0.019	0.005	4897	g1	t11

Holding games

							HH prefers its choice by			XG prefers its choice by					
No.	**Page**	**Away**	**Roll**	**(a)**	**(b)**	**Played**	2	3	4-ply	2	3	4-ply			**Match**
136	26	5A3A	63	8/2 5/2	10/7 10/4	HH (a)	0.007	0.001	0.024	0.091	*0.040*	0.048	624	g2	t23
137	26	3A2A	44	13/9(3) 6/2	15/11(2) 8/4(2)	XG (b)	0.128	0.086	0.114	0.122	0.008	0.044	2297	g4	t9
138	26	5A1AC	65	20/15 20/14	14/8 13/8	HH (a)	0.011	0.030	0.038	0.090	0.037	0.037	2887	g2	t35
139	26	5A3A	61	13/7 8/7	22/21 22/16	XG (b)	0.084	0.077	0.057	0.020	0.027	0.008	4666	g2	t6
140	26	1A3A	33	13/10(2) 12/9(2)	14/11*(2) 8/5*/2	HH (a)	0.013	0.014	0.012	0.080	0.024	0.064	4859	g5	t23
141	26	3A5A	11	13/12(3) 2/1	15/14 6/5*(2) 2/1	HH (a)	0.073	0.071	0.035	0.081	*0.040*	0.032	4915	g2	t15
142	27	4A5A	cube	ND	DT	XG (a)	0.118	0.085	0.051	0.020	0.047	0.017	17	g2	t20
143	27	3A4A	cube	DT	DP	HH (b)	0.024	0.065	0.055	0.099	0.110	0.060	48	g3	t5
144	27	3A2A	cube	DT	DP	XG (a)	0.082	0.079	0.049	0.031	0.035	0.014	70	g4	t8
145	27	5A5A	cube	ND	DT	XG (a)	0.081	0.100	0.084	0.035	0.009	0.003	304	g1	t13
146	27	4A4A	cube	ND	DT	XG (a)	0.119	0.074	0.024	0.003	0.060	0.029	351	g3	t9
147	27	5A5A	cube	ND	DT	XG (a)	0.099	0.026	0.023	0.002	0.017	0.012	523	g1	t11
148	28	5A5A	cube	ND	DT	XG (a)	0.112	0.048	0.042	0.002	0.026	0.022	1710	g1	t8
149	28	5A5A	cube	ND	DT	XG (a)	0.087	0.042	0.027	0.006	0.029	0.021	2439	g1	t6

150	28	5A5A	cube	ND	DT	XG (a)	0.103	0.061	0.045	0.008	0.013	0.018	2457	g1	t10
151	28	5A5A	cube	ND	DT	XG (a)	0.096	0.073	0.068	0.010	0.034	0.012	2558	g1	t13
152	28	5A5A	cube	ND	DT	XG (a)	0.095	0.042	0.035	0.003	0.013	0.017	2648	g1	t8
153	28	5A5A	cube	ND	DT	XG (a)	0.085	0.050	0.033	0.006	0.019	0.013	3103	g1	t4
154	29	3A4A	cube	DT	DP	HH (b)	0.004	0.045	0.032	0.083	0.052	0.045	3380	g4	t7
155	29	5A5A	cube	ND	DT	XG (a)	0.097	0.041	0.034	0.014	0.043	0.034	3403	g1	t6
156	29	5A5A	cube	ND	DT	HH (b)	0.050	0.057	0.051	0.086	0.040	0.057	3683	g1	t10
157	29	5A5A	cube	ND	DT	XG (a)	0.098	0.037	0.027	0.013	0.015	0.013	4045	g1	t9
158	29	5A5A	cube	ND	DT	XG (a)	0.084	0.048	0.029	0.032	0.057	0.039	4214	g1	t7
159	29	4A5A	cube	ND	DT	XG (a)	0.099	0.072	0.033	0.027	0.077	0.050	4440	g2	t9
160	30	4A5A	cube	ND	DT	XG (a)	0.091	0.029	0.025	0.000	0.048	0.032	4494	g2	t10
161	30	4A5A	cube	ND	DT	XG (a)	0.112	0.073	0.064	0.025	0.041	0.019	4508	g2	t18

Back games

							HH prefers its choice by			XG prefers its choice by					
No.	**Page**	**Away**	**Roll**	**(a)**	**(b)**	**Played**	2	3	4-ply	2	3	4-ply		**Match**	
162	31	5A5A	33	20/14 5/2*(2)	20/17(3) 7/4	HH (a)	0.161	0.010	0.029	0.082	0.043	0.063	103	g1	t47
163	31	5A2A	43	8/5*/1	24/21 6/2	HH (b)	0.025	0.034	0.017	0.182	*0.029*	0.096	300	g3	t36
164	31	3A2A	42	24/22* 7/3*	14/12 7/3*	HH (a)	0.001	0.019	0.003	0.127	*0.144*	*0.106*	597	g4	t51
165	31	3A2A	21	bar/23* 3/2*	bar/24 22/20	HH (a)	0.046	0.052	0.032	0.208	*0.333*	*0.162*	597	g4	t53
166	31	2A3A	66	24/18 22/16(2) 13/7	24/18(2) 22/16 13/7	XG (b)	0.097	0.062	0.076	0.017	*0.020*	0.024	706	g4	t10
167	31	3A2A	31	24/21* 4/3*	13/10* 6/5	HH (a)	0.011	0.012	0.002	0.128	*0.022*	0.029	1149	g4	t15
168	32	1A1A	11	8/6 4/3(2)	24/22 24/23 4/3	HH (b)	0.042	0.014	0.008	0.101	0.064	0.046	1962	g6	t33
169	32	5A5A	21	23/22* 6/4	24/21*	XG (a)	0.083	0.080	0.059	0.049	*0.020*	0.020	2313	g1	t41
170	32	4A1A	51	22/16	24/19 16/15	HH (b)	0.014	0.002	0.011	0.098	*0.091*	*0.063*	3042	g4	t68
171	32	5A5A	55	8/3*(2) 7/2*(2)	22/7 22/17	HH (a)	0.033	0.040	0.029	0.090	0.043	0.060	3056	g1	t32
172	32	4A1A	55	23/18(4)	23/8* 13/8	HH (b)	0.427	0.423	0.435	0.261	*0.069*	*0.147*	3160	g3	t53
173	32	5A5A	62	13/5	8/6 8/2	HH (b)	0.053	0.054	0.051	0.098	0.087	0.046	3168	g1	t23
174	33	5A4A	43	24/20 23/20	24/21 8/4	XG (a)	0.106	0.091	0.069	0.117	0.059	0.073	3717	g2	t31
175	33	3A5A	31	9/5	11/10 4/1*	HH (a)	0.049	0.011	0.017	0.089	0.034	0.042	3770	g2	t40
176	33	2A1A	53	bar/17	bar/20 18/15*	HH (b)	0.002	0.013	0.004	0.089	0.025	0.058	3867	g4	t43
177	33	5A5A	51	10/4	8/3 7/6	HH (b)	0.032	0.019	0.004	0.143	*0.025*	0.061	4201	g1	t26
178	33	5A5A	cube	ND	DT	XG (a)	0.127	0.049	0.034	0.002	0.008	0.004	136	g1	t15
179	33	5A5A	cube	ND	DT	XG (a)	0.140	0.036	0.027	0.033	0.044	0.038	149	g1	t25
180	34	5A5A	cube	ND	DT	XG (a)	0.138	0.045	0.028	0.067	0.068	0.055	168	g1	t34
181	34	4A5A	cube	ND	DT	XG (a)	0.216	0.061	0.028	0.008	0.021	0.024	1331	g2	t15
182	34	4A5A	cube	ND	DT	XG (a)	0.213	0.068	0.050	0.019	0.022	0.034	1331	g2	t17
183	34	5A5A	cube	ND	DT	XG (a)	0.104	0.057	0.050	0.025	0.019	0.009	1848	g1	t16
184	34	5A5A	cube	ND	DT	XG (a)	0.185	0.067	0.023	0.043	0.068	0.066	1882	g1	t25
185	34	5A5A	cube	ND	DT	XG (a)	0.165	0.055	0.032	0.067	0.068	0.076	1882	g1	t27
186	35	5A5A	cube	ND	DT	XG (a)	0.135	0.035	0.022	0.057	0.032	0.041	2052	g1	t22
187	35	5A5A	cube	ND	DT	XG (a)	0.138	0.066	0.026	0.048	0.034	0.057	2052	g1	t24
188	35	5A5A	cube	ND	DT	XG (a)	0.110	0.041	0.023	0.122	0.163	0.132	2412	g1	t22
189	35	5A5A	cube	ND	DT	XG (a)	0.155	0.056	0.037	0.033	0.048	0.042	2418	g1	t15
190	35	5A4A	cube	DT	DP	HH (b)	0.019	0.010	0.024	0.131	0.086	0.093	2461	g2	t17
191	35	4A3A	cube	ND	DT	XG (a)	0.098	0.029	0.094	0.151	0.105	0.005	2925	g3	t18
192	36	5A5A	cube	DT	DP	HH (b)	0.068	0.015	0.024	0.110	0.197	0.120	3758	g1	t59
193	36	4A3A	cube	DT	DP	HH (b)	0.072	0.097	0.031	0.147	0.107	0.156	4304	g3	t13
194	36	5A5A	cube	DT	DP	HH (b)	0.168	0.059	0.133	0.090	0.068	0.097	4574	g1	t25
195	36	5A3A	cube	ND	DT	XG (a)	0.087	0.088	0.059	0.074	0.010	0.018	4824	g2	t25

Containing the last checkers

							HH prefers its choice by			XG prefers its choice by					
No.	**Page**	**Away**	**Roll**	**(a)**	**(b)**	**Played**	2	3	4-ply	2	3	4-ply		**Match**	
196	37	4A5A	63	24/18 6/3*	24/21 22/16	HH (a)	0.138	0.166	0.150	0.885	*0.394*	*0.502*	509	g2	t53
197	37	4A5A	31	7/4*/3	24/23* 7/4*	HH (b)	0.189	0.165	0.149	1.319	*0.904*	*0.730*	509	g2	t55
198	37	4A5A	54	bar/21 23/18	bar/20 23/19	HH (b)	0.047	0.018	0.029	0.217	*0.520*	*0.594*	509	g2	t57
199	37	4A5A	41	bar/24 7/3	bar/20*	HH (b)	0.338	0.310	0.310	0.669	*0.173*	*0.141*	509	g2	t59
200	37	4A5A	64	bar/21 24/18	bar/19 18/14	HH (b)	0.127	0.047	0.103	0.695	*0.090*	*0.607*	509	g2	t61

201	37	4A5A	31	19/18 14/11	20/17 18/17	HH (a)	0.079	0.040	0.069	0.474	*0.290*	*0.312*	509	g2	t63
202	38	4A5A	62	18/16 11/5	20/14 19/17	HH (b)	0.027	0.040	0.023	0.147	*0.432*	*0.077*	509	g2	t67
203	38	4A5A	43	11/4*	18/11	HH (a)	0.037	0.022	0.053	0.654	*0.494*	*0.415*	509	g2	t71
204	38	4A5A	32	bar/22 24/22	bar/22 5/3*	HH (b)	0.083	0.074	0.076	0.765	*1.195*	*0.697*	509	g2	t73
205	38	4A5A	43	21/17 20/17	7/4* 7/3	HH (b)	0.186	0.053	0.112	1.145	*0.372*	*0.637*	509	g2	t75
206	38	4A5A	31	18/14	23/22 20/17	HH (a)	0.091	0.081	0.064	0.975	*0.836*	*0.278*	509	g2	t79
207	38	4A5A	54	14/5	23/14	HH (b)	0.048	0.012	0.027	0.229	0.243	*0.139*	509	g2	t85
208	39	4A5A	64	24/18 17/13	22/16 17/13	HH (b)	0.083	0.046	0.064	0.319	0.089	0.024	509	g2	t87
209	39	4A5A	21	14/13 14/12*	13/12* 6/4*	HH (b)	0.025	0.012	0.033	2.131	*1.268*	*1.090*	509	g2	t89
210	39	4A5A	61	12/6 4/3	14/8 13/12	HH (b)	0.088	0.045	0.071	2.255	*0.764*	*0.745*	509	g2	t91
211	39	1A1A	41	21/20 21/17	19/14	HH (b)	0.016	0.003	0.006	0.112	0.044	0.077	1264	g5	t41
212	39	5A3A	52	bar/20 7/5*	bar/23 6/1	HH (a)	0.048	0.049	0.047	0.133	0.038	0.080	1641	g2	t62
213	39	5A3A	65	bar/19 6/1	bar/20 11/5*	HH (b)	0.049	0.029	0.027	0.135	*0.043*	*0.079*	1641	g2	t66
214	40	4A2A	44	22/14 18/14(2)	18/10(2)	HH (b)	0.067	0.071	0.061	0.166	0.129	*0.074*	2206	g4	t40
215	40	5A5A	51	11/5*	22/21 11/6	HH (a)	0.047	0.082	0.065	0.120	0.116	0.091	2217	g1	t46
216	40	5A5A	61	20/14 13/12*	13/12*/6	HH (a)	0.015	0.024	0.021	0.140	0.044	0.033	2217	g1	t50
217	40	5A3A	61	bar/24 21/15	bar/18	HH (b)	0.014	0.007	0.011	0.140	*0.047*	*0.069*	3078	g2	t67
218	40	5A3A	42	22/18 17/15	19/13	HH (b)	0.042	0.031	0.033	0.174	*0.049*	*0.052*	3078	g2	t71
219	40	5A3A	63	15/9 6/3*	15/12*/6	HH (a)	0.040	0.018	0.018	0.109	*0.102*	*0.090*	3271	g2	t72
220	41	5A3A	41	bar/21 3/2*	bar/24 16/12	HH (a)	0.058	0.001	0.015	0.180	0.061	0.077	3353	g2	t150
221	41	3A1A	32	bar/22 10/8*	bar/20*	HH (b)	0.005	0.008	0.007	0.107	*0.043*	0.065	3624	g4	t48
222	41	3A1AC	66	24/6 10/4	24/12 23/11	HH (b)	0.018	0.009	0.031	0.180	0.030	0.068	3834	g4	t82
223	41	5A3A	41	16/12 3/2	16/12 7/6	HH (a)	0.018	0.011	0.024	0.085	*0.030*	*0.055*	3965	g2	t94
224	41	3A3A	64	18/12 15/11*	15/11*/5	HH (a)	0.037	0.015	0.017	0.226	*0.079*	*0.025*	4105	g4	t62
225	41	3A3A	64	12/6 11/7*	13/7* 6/2*	HH (b)	0.070	0.042	0.051	0.785	*0.268*	*0.111*	4105	g4	t64
226	42	3A3A	31	10/7 2/1*	10/6	HH (a)	0.046	0.023	0.039	0.157	*0.094*	*0.025*	4105	g4	t74
227	42	5A3A	51	12/7*/6	12/7* 2/1*	HH (b)	0.021	0.008	0.018	0.113	*0.066*	*0.038*	4334	g2	t64
228	42	5A5A	cube	ND	DT	XG (b)	0.096	0.075	0.030	0.069	0.015	0.013	2127	g1	t35

Hit in the bear-off

							HH prefers its choice by			XG prefers its choice by					
No.	**Page**	**Away**	**Roll**	**(a)**	**(b)**	**Played**	2	3	4-ply	2	3	4-ply			**Match**
229	43	4A5A	53	13/5*	21/13	XG (a)	0.296	0.168	0.168	0.894	*0.679*	0.255	509	g2	t58
230	43	5A5A	cube	DT	DP	HH (b)	0.024	0.023	0.013	0.123	0.096	0.088	1806	g1	t41

Saving the gammon and backgammon

							HH prefers its choice by			XG prefers its choice by					
No.	**Page**	**Away**	**Roll**	**(a)**	**(b)**	**Played**	2	3	4-ply	2	3	4-ply			**Match**
231	44	5A5A	61	23/17 11/10	23/17 21/20	HH (b)	0.033	0.004	0.011	0.219	*1.075*	*0.151*	271	g1	t78
232	44	4A5A	62	24/22*/16	24/22* 24/18	HH (b)	0.171	0.122	0.056	0.218	0.050	0.078	509	g2	t51
233	44	5A5A	55	bar/15 bar/20 9/4	bar/15(2)	XG (b)	0.151	0.029	0.051	0.030	0.021	0.036	1278	g1	t49
234	44	2A5A	21	15/14 8/6	13/11 6/5	XG (a)	0.113	0.087	0.061	0.083	*0.032*	0.014	1604	g4	t53
235	44	5A5A	55	19/9(2)	19/4 8/3	HH (b)	0.097	0.068	0.051	0.090	*0.063*	*0.072*	1989	g1	t55
236	44	5A5A	55	bar/10 11/6	bar/10 8/3	XG (b)	0.102	0.034	0.037	0.021	*0.027*	0.001	3395	g1	t38
237	45	5A5A	33	bar/19 22/19(2)	bar/16 19/16	XG (b)	0.285	0.134	0.247	0.063	0.016	0.079	3642	g1	t48
238	45	3A5A	53	23/18 15/12	23/18 6/3	HH (a)	0.058	0.041	0.053	0.167	*0.115*	*0.147*	3804	g2	t66
239	45	3A5A	54	18/9	12/3	HH (a)	0.019	0.020	0.042	0.312	0.170	*0.281*	3804	g2	t68
240	45	5A5A	66	19/7 13/7(2)	19/7 13/7 9/3	XG (a)	0.118	0.057	0.041	0.041	*0.019*	0.020	3845	g1	t54
241	45	5A5A	61	9/3 7/6	14/8 7/6	XG (b)	0.091	0.065	0.076	0.043	0.022	0.019	3845	g1	t56
242	45	5A5A	21	20/17	9/6	XG (b)	0.139	0.044	0.047	0.121	*0.077*	0.029	3847	g1	t68
243	46	3A3A	51	bar/24* 18/13	bar/24* 20/15	HH (a)	0.061	0.077	0.079	0.279	*0.025*	*0.093*	4105	g4	t58
244	46	5A2A	44	13/9(4)	13/9(2) 10/6 7/3	HH (b)	0.194	0.057	0.058	0.084	*0.050*	*0.067*	4330	g3	t33
245	46	5A3A	41	24/20 4/3	24/19	HH (b)	0.019	0.013	0.009	0.120	0.026	0.061	4334	g2	t44
246	46	3A4A	41	7/2	7/3 4/3	XG (b)	0.252	0.141	0.140	0.116	*0.038*	0.028	4337	g3	t47
247	46	1A4A	66	bar/7 13/7	bar/19 13/7(2) 9/3	HH (b)	0.047	0.023	0.020	0.130	*0.069*	0.076	4638	g4	t32
248	46	3A1A	21	13/12 13/11	8/6 7/6	XG (a)	0.081	0.046	0.049	0.127	*0.165*	0.007	4723	g5	t28
249	47	5A1AC	61	23/17 2/1	23/17 13/12	XG (a)	0.080	0.049	0.041	0.029	0.030	0.150	4878	g4	t54