

## Backgammon Replies

Mini-quiz: Decide how you would play the rolls indicated in the three positions diagrammed above. For the answers, consult the chart on the the next page, which is a summary of all the best backgammon "replies" (second roll plays).

How to read the chart: To save (a huge amount of) space, Nactation is used. You can read about it by googling "Nactation" or go to http://www.nackbg.com/nactation.pdf (recommended) and/or read the Nactation key underneath the chart.

Each three-character entry on the far left (and repeated on the far right) of a row is an opening roll and play. Each two-number entry at the top (and repeated at the bottom) of a column is the reply roll. For example, in the 31P row, the first player rolled an opening 31 and played " $P$ " (made her 5pt). In the 21 column, the second player rolls 21. In the intersection box (of 31P and 21), the best move with 21 is listed as "S," which means "split" - a play that would be traditionally notated 24/23 13/11.

When more than one letter/character is listed in a box, two or more best plays are effectively tied. For example, In the intersection of the 32D row and 51 column, the box reads " $\$$ S." This means that with opening 32D (13/10 13/11) played and 51 rolled in reply, $\$$ (i.e., slotting with $13 / 86 / 5$ ) and S (i.e., splitting with $24 / 2313 / 8$ ) are both best/tied. By tied, I mean that the plays with the highest and second highest equities in the GnuBG rollout are within .01 of each other (or occasionally that the Snowie rollout favors a different best play), for money.

Source: The collection of rollouts posted by Stick Rice as of September, 2009 (and GnuBG 4-ply evaluation when there is no rollout.) You can access these rollouts by using Nactation to navigate. For example, to see the comprehensive rollout data for the position mentioned in my previous paragraph, go to Stick's site at http://www.bgonline.org and click on the " 2 nd Roll" tab, then "Opening 32 replies, then "32D 51."

|  | 11 | 21 | 31 | 41 | 51 | 61 | 22 | 32 | 42 | 52 | 62 | 33 | 43 | 53 | 63 | 44 | 54 | 64 | 55 | 65 | 66 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 21\$ | N | \$S | H | U | S | P | e | S | S | S | ZNS | C | US | P | R | B | SR | K | P | R | B | 21\$ |
| 215 | e | US | P | K | S | P | N | S | P | S | S | B | XZ | PS | SR | B | S | H | A | R | B | 21S |
| 31P | eN | S | P | S | S | P | E | ZS | P | S | S | B | S | P | S | P | D | R | P | R | B | 31P |
| 41\$ | HN | \$ | H | U | \$ | P | e | S | S | S | H | CE | U | H | RS | 4 | S | R | P | R | B | 41\$ |
| 41 S | e | S | P | K | S | P | EN | ZS | P | S | H | B | X | H | SR | K | XSR | P | A | R | B | 41S |
| 51\$ | N | \$ | H | U | \$ | P | e | \$ | S | \$S | R | C | S | P | R | B | S | R | P | R | B | 51\$ |
| 51 S | e | \$U | P | K | S | P | N | DS | P | S | R | B | UDSX | P | R | B | S | P | A | R | B | 51S |
| 61P | N | \$ | P | S | S | P | N | ZS | P | S | R | B | UZ | P | R | B | RS | R | P | D | O | 61P |
| 32D | N | \$ | P | \$ | \$S | P | EUN | ZD | P | S | S | C | D | P | H | B | H | H | P | R | B | 32D |
| 32 S | P | X | P | X | S | P | N | H | P | H | HX | B | H | P | H | C | H | H | A | R | B | 32S |
| $32 Z$ | e | HS | P | USH | SR | P | N | KXH | P | SK | S | A | XH | P | H | B | H | H | A | RS | B | 32 Z |
| 42P | N | S | P | S | S | P | E | S | P | S | S | A | SD | P | SR | B | S | PR | P | R | B | 42P |
| 52D | N | \$ | P | \$ | \$ | P | N | D | P | D | S | A | D | P | SR | B | D | H | P | R | B | 52D |
| 52 S | e | SH | P | D | S | P | N | H | P | DS | SR | A | H | P | R | B | S | H | A | R | B | 52 S |
| 62R | eN | U | H | X | S | P | 4 | US | DX | S | \$Z | A | XD | P | Z | BP | D | X | A | R | B | 62R |
| 62\$ | N | \$ | H | U | \$S | P | e | \$D | S | \$ | S\$ | AC | S | P | \$ | B | S | R | P | R | B | 62\$ |
| 62 S | N | H | P | H | H | P | N | WSU | H | X | X | P | ZU | P | X | B | X | H | A | K | B | 625 |
| 43D | N | \$ | P | \$ | \$ | P | E | ZD | P | S | H | C | D | H | H | B | H | RS | P | R | B | 43D |
| 43 S | e | H | P | HX | H | X | N | H | P | S | H | A | XH | H | H | P | H | P | A | R | B | 43S |
| $43 Z$ | P | X | P | X | SX | P | N | HX | P | H | H | B | HX | H | H | K | H | R | A | R | B | 43Z |
| 43 U | P | K | P | K | H | H | N | K | P | H | H | A | X | H | 4 | K | HS | P | P | S | B | 43U |
| 53P | N | S\$ | P | S | S | P | N | S | P | D | S\$ | B | DZ | P | S | B | SD | P | P | R | B | 53P |
| 63R | eN | H | X | S\$ | S\$ | P | N | X | P | S | \$S | N | XD | D | X | B | SX | S | A | R | B | 63R |
| 63 S | N | H | P | HX | H | P | N | WZSU | H | XS | X | P | Z | P | H | B | H | X | A | K | B | 63 S |
| 54D | N | \$ | P | \$ | \$ | P | E | D | P | D | H | EB | D | H | RS | D | DR | R | P | R | B | 54D |
| 54 S | e | H | P | H | H | P | N | H | P | S | H | A | H | H | H | P | S | P | A | R | B | 54S |
| 64P | N | \$ | P | \$ | \$ | P | EN | DZ | P | SD | \$S | BA | D | P | S | B | D | P | P | R | B | 64P |
| 64R | N | X | P | \$ | \$ | P | N | XD | X | D | X | A | S | P | S | B | S | SP | A | R | B | 64R |
| 64S | N | XH | PX | XH | H | P | H | S | H | X | H | P | Z | H | X | RD | X | X | A | K | B | 64S |
| 65R | N | \$ | P | \$S | \$S | P | N | S | P | D | S | B | Z | P | S | B | S | PS | A | R | B | 65R |
|  | 11 | 21 | 31 | 41 | 51 | 61 | 22 | 32 | 42 | 52 | 62 | 33 | 43 | 53 | 63 | 44 | 54 | 64 | 55 | 65 | 66 |  |

## Nactation Key:

$\mathrm{D}=$ Down (from the midpoint, usually with two checkers).
$H=$ Hit on highest point possible. If H describes only half the roll, the other half comes down (e.g., for 32S-43, H means 13/10 8/4*).
$K=$ Kill: hit twice
$\mathrm{P}=$ Point on head if possible, or make the strongest offensive point available.
R = Run (to the outfield) with one checker. Exception: for 64S-44, R means run both checkers (i.e., 24/16(2)).
$\$=$ Slot. Move one checker down from the midpoint and use it or another checker to slot the 5 pt or 4 pt (unstacking the 6 pt when possible).
$\mathrm{S}=$ Split the back checkers and bring one checker down from the midpoint. S sometimes hits incidentally.
$Z=$ Reverse split. When more than one splitting play is possible, $Z$ splits with the small number and comes down with the large number.
$U=U p$ with two back checkers. Exception: with a roll of 21, U brings up only one checker (i.e., 24/21).
$\mathrm{W}=$ Wild. Split with the large number and slot the 5 pt or 4 pt with the small number.
X = Hit and Split.
$4=$ Make the 4 pt, or (in the case of $43 \mathrm{U}-63$ ) hit on the 4 pt .
Mostly for Doublets:
A = Attack. Make two inside points. Example: for 41S-55, A means 8/3(2) 6/1*(2)).
$B=$ Both. Move up and down, making an anchor and an outer point. Example: for 32D-44, B means 24/20(2) 13/9(2).
C = Cross. Cross the bar — making an offensive point, and make an anchor. Example: for 51\$-33, C means 24/21(2) 8/5(2).
E = Each. Make a point in each inner board. Example: for 54D-22, E means 24/22(2) 6/4(2).
$e=$ each (variant). Split and make an inside point. Example: For 21S-11, "e" means 24/22 6/5(2).
$\mathrm{N}=$ Near. Move half the roll to/within each near-side quadrant (inner board, outer board). Example: for 62S-11, N means $8 / 7^{*}(2) 6 / 5(2)$.
$\mathrm{O}=$ Outer. Half of play into the outer board and half out of the outer board. Example: for 61P-66, O means 13/7(2) 8/2(2).

Notes: Hits and highly obvious portions of a move are occasionally assumed. Examples: For 62R-22 and 41\$-44, the "4" refers to hitting (once or twice) and making the 4pt. For 54D-44 and 64S-44, "D" means hitting and coming down with $24 / 16^{*} 13 / 9(2)$. For more on assumptive Nactation, go to http://www.nackbg.com/nactation.pdf and read Section 6.

