5/2

SNAKE EYES

Player #1

	Pts	banked pts
1	15	15
2	0	15
3	10	25
4	10	35
5	0	35
6	26	61
7	0	61
8	17	78
9	0	78
10	6	84
11	15	99
12	16	115
13	0	115
14	0	116
15	16	131

Player #2

Pts	banked pts
13	13
10	23
14	37
16	53
14	67
0	67
0	67
20	87
6	93
8	101
7	108
5	113
6	119
10	129
0	129

probability - chance of an event occurring
odds - ratio of favorable to all unfavorable outcomes

0 — 50% — 100%
0% — $\frac{1}{2}$ — 1
0 — .5 — 1

$\frac{1}{2}$ chance (favorable out of (all out

roll a die = 1 out of 6 = $\frac{1}{6}$ odds = 1 to 5
flip a coin = 1 out of 2 = $\frac{1}{2}$ odds = 1 to 1

5/2

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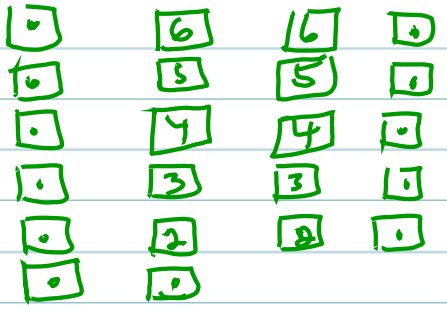
Snake eyes

(bankrupt)

"get a eye"
(lose round)



What are the "odds" of snake eyes?
What are the "odds" of getting a ⚀?

The probability of snake eyes is? 1 out of 36
1:35 (odds)

Why might snake eyes occur more/less frequently than 1:35 odds (1/36 prob)?

experimental prob - your actual data set

Theoretical problem - what the prob/odds are.

exp. match theoretical as your # of trials gets larger.

Outcomes of TWO Dice Roll

1/36 2 – (1,1)

3 – (1,2) (2,1)

4 – (1,3) (3,1) (2,2)

5 – (1,4) (4,1) (2,3) (3,2)

6 – (1,5) (5,1) (2,4) (4,2) (3,3)

7 – (1,6) (6,1) (3,4) (4,3) (5,2) (2,5) *

4/36 (1/6) 8 – (6,2) (2,6) (3,5) (5,3) (4,4)

9 – (4,5) (5,4) (6,3) (3,6)

10 – (4,6) (6,4) (5,5)

11 – (5,6) (6,5)

1/36 12 – (6,6)

Roll dice

O = 𝍸 𝍸 𝍸 𝍸 111 (18)

E = 𝍸 𝍸 𝍸 𝍸 11 (18)

Prob = 18/36

odds = 18|18 1:1 even

odds

2,12 = 1:35

3,11 = 2:34 1:17

4,10 = 3:33 1:11

5,9 = 4:32 1:8

6,8 = 5:31

7 = (6:30) 1:5