

Alea Romana

by David Parlett

Probable outcomes of rolling from one to six dice marked I-I-I-V-X-X

Colour code = number of dice rolled (1 grey, 2 blue, 3 yellow, 4 green, 5 orange, 6 purple),

tot = total value of all dice rolled, **num** = number of different ways of reaching given total,

in = number of possible outcomes of rolling given number of dice,

% = probability of making given total for given number of dice rolled.

Note: rolls ending in IV and IX are ignored, being counted instead as VI and XI respectively.

In the leftmost column, black = safe totals (you can roll again without fear of busting), red = unsafe

tot	1	2	3	4	5	6	tot	num	in	= %
1	3						1	3	6	50.00
2		9					10	2	6	33.33
3			27				2	9	36	25.00
5	1						11	12	36	25.00
6		6					12	54	216	25.00
7			27				5	1	6	18.67
8				108			6	6	36	18.67
10	2						16	36	216	16.67
11		12					21	36	216	16.67
12			54				13	216	1296	16.67
13				216			17	216	1296	16.67
15		4					22	216	1296	16.67
16			36				18	1080	7776	13.89
17				216			23	1080	7776	13.89
18					1080		27	1080	7776	13.89
20		4					3	27	216	12.50
21			36				7	27	216	12.50
22				216			15	4	36	11.11
23					1080		20	4	36	11.11
25			12				26	144	1296	11.11
26				144			32	720	7776	9.26
27					1080		33	4320	46656	9.26
28						6480	37	4320	46656	9.26
30			8				8	108	1296	8.33
31				96			31	96	1296	7.41
32					720		36	480	7776	6.17
33						4320	25	12	216	5.55
35				32			28	2160	46656	4.63
36					480		30	8	216	3.70
37						4320	39	240	7776	3.09
39					240		35	32	1296	2.47
Σ	6	35	200	1018	4680	15120				
	100	97.22	92.59	78.55	60.19	32.41	= probability of making a valid total			
	4.67	9.00	13.95	19.58	26.31	33.63	= average total made on <i>d</i> dice			

Errors? Please notify david@parlettgames.uk