## **Yspahan - Value of Buying a Yellow Die**

Calculated by Hein Hundal Formatted by Chuck Berry

Examples: Buying a yellow die increases the chance of a Vase by about 8%.

A 9th die (2 players) increases the chance of a Chest or Vase by about 20%.

Dice	Different Dice:					
Rolled:	1	2	3	4	5	6
1	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2	16.67%	83.33%	0.00%	0.00%	0.00%	0.00%
3	2.78%	41.66%	55.56%	0.00%	0.00%	0.00%
4	0.46%	16.20%	55.56%	27.78%	0.00%	0.00%
5	0.08%	5.79%	38.58%	46.29%	9.26%	0.00%
6	0.01%	1.99%	23.15%	50.16%	23.15%	1.54%
7	0.00%	0.68%	12.90%	45.01%	36.01%	5.40%
8	0.00%	0.23%	6.90%	36.46%	45.01%	11.40%
9	0.00%	0.08%	3.60%	27.76%	49.66%	18.90%
10	0.00%	0.03%	1.85%	20.30%	50.64%	27.18%
11	0.00%	0.01%	0.94%	14.46%	48.97%	35.62%
12	0.00%	0.00%	0.48%	10.11%	45.63%	43.78%

## Freestanding Probability

## Cumulative Probability

Dice	Different Dice:					
Rolled:	1+	2+	3+	4+	5+	6+
1	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2	100.00%	83.33%	0.00%	0.00%	0.00%	0.00%
3	100.00%	97.22%	55.56%	0.00%	0.00%	0.00%
4	100.00%	99.54%	83.34%	27.78%	0.00%	0.00%
5	100.00%	99.92%	94.13%	55.55%	9.26%	0.00%
6	100.00%	99.99%	98.00%	74.85%	24.69%	1.54%
7	100.00%	100.00%	99.32%	86.42%	41.41%	5.40%
8	100.00%	100.00%	99.77%	92.87%	56.41%	11.40%
9	100.00%	100.00%	99.92%	96.32%	68.56%	18.90%
10	100.00%	100.00%	99.97%	98.12%	77.82%	27.18%
11	100.00%	100.00%	99.99%	99.05%	84.59%	35.62%
12	100.00%	100.00%	100.00%	99.52%	89.41%	43.78%

## Increase from Nth Die

	Different Dice:							
	1	2	3	4	5	6		
Added:	Camel	Gold	Sack	Barrel	Chest	Vase		
Rolled:								
9	0.00%	0.00%	0.15%	3.45%	12.15%	7.50%		
10	0.00%	0.00%	0.05%	1.80%	9.26%	8.28%		
11	0.00%	0.00%	0.02%	0.93%	6.77%	8.44%		
12	0.00%	0.00%	0.01%	0.47%	4.82%	8.16%		