

mobius

Probability Counting - Choose N Cards from M, Probability Counting - To Bracket



1	What's the chared Grawing three 4s from this set? Show as						a
	4	bin	omia	et ot	ficie ation 4	nts	
	4	•	4	♦	8	♦	
							I

	4		•
a	$\frac{\binom{5}{3}}{\binom{8}{4}}$	$\frac{\begin{bmatrix} 3\\3 \end{bmatrix}}{\begin{bmatrix} 5\\5 \end{bmatrix}}$	$\frac{\binom{3}{3}}{\binom{8}{3}}$
	$\frac{\binom{3}{2}}{\binom{3}{6}}$	$\frac{\binom{6}{2}}{\binom{8}{5}}$	$\frac{\binom{4}{3}}{\binom{6}{3}}$
	^	_	_

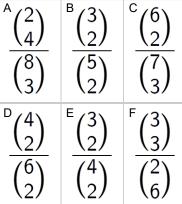
_	drawing two Aces from this set? Show as						
	Α	oin ♦ (b	omial coe	ation)			
	Α	•	A ♣	A •			

What's the chance of

$ \begin{array}{c c} $			
$\frac{\binom{2}{4}}{\binom{5}{5}} = \frac{\binom{4}{3}}{\binom{9}{3}} = \frac{\binom{3}{3}}{\binom{9}{3}}$	$\frac{\binom{5}{2}}{\binom{2}{1}}$	$\frac{\binom{4}{2}}{\binom{6}{2}}$	$\frac{{}^{c}\binom{2}{4}}{\binom{6}{4}}$
	$\frac{\binom{2}{4}}{\binom{5}{1}}$	$\frac{\binom{4}{3}}{\binom{9}{1}}$	$\frac{\binom{3}{3}}{\binom{8}{3}}$



What's the chance of



4	4	•	Q ♦
4 ♣	K	•	10♣

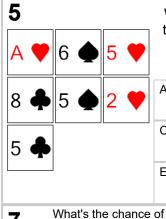
bin	binomial coefficients (bracket notation).						
Α	$\frac{\binom{2}{3}}{\binom{5}{3}}$	В	$\frac{\binom{2}{3}}{\binom{8}{3}}$				
С	$\frac{\binom{3}{3}}{\binom{8}{3}}$	D	$\frac{\binom{3}{3}}{\binom{2}{6}}$				
E	$\frac{\binom{3}{3}}{\binom{6}{2}}$	F	$\frac{\binom{3}{2}}{\binom{6}{2}}$				

What's the chance of drawing

two 3s from this set? Show as

What's the chance of drawing

two 4s from this set? Show as



two 5s from this set? Show as binomial coefficients (bracket notation).						
A	$\frac{\binom{3}{2}}{\binom{7}{2}}$	В	$\frac{\binom{2}{3}}{\binom{2}{7}}$			
С	$\frac{\binom{3}{2}}{\binom{6}{3}}$	D	$\frac{\binom{3}{3}}{\binom{5}{2}}$			
E	(⁵ ₄)	F	(³ ₃)			

What's the chance of drawing

3 ♠ 3 ♣ 5 ♣
Q ♦ 3 ♥ 3 ♦
6 🏚
What's the chance

6

bind		efficients (b otation).	racket	
Α	$\frac{\binom{2}{4}}{\binom{7}{3}}$	В	$\frac{\binom{5}{2}}{\binom{5}{2}}$	
С	$\frac{\binom{4}{2}}{\binom{7}{2}}$	D	$\frac{\binom{2}{4}}{\binom{2}{7}}$	
E	$\frac{\binom{2}{4}}{\binom{7}{1}}$	F	$\frac{\binom{6}{2}}{\binom{7}{1}}$	

<i>[</i>	drawing two Kings from this set? Show as						
	Α	A b	omial coel	ation)			
	K	♦	K 🏚	3 ♦			
	8	•					

$\overline{\binom{8}{2}}$	$\frac{9}{4}$	$\overline{\binom{9}{2}}$
$\frac{\binom{2}{4}}{\binom{8}{4}}$	$\frac{\binom{3}{2}}{\binom{6}{2}}$	$\frac{{\mathsf F}\binom{4}{2}}{\binom{7}{2}}$



$\frac{\binom{2}{4}}{\binom{7}{2}}$	F	$\binom{\binom{6}{2}}{\binom{7}{4}}$
$\frac{\binom{2}{4}}{\binom{2}{5}}$	$\frac{\binom{4}{3}}{\binom{2}{5}}$	$\frac{{}^{c}\binom{3}{3}}{\binom{2}{5}}$
$\frac{\binom{4}{2}}{\binom{5}{2}}$	$\frac{\binom{3}{2}}{\binom{7}{3}}$	$\frac{{\mathsf F}\binom{5}{4}}{\binom{3}{2}}$