



Math worksheet on 'Probability - Cards, From Hand Ordered, To Binomial Equation (Level 2)'. Part of a 'Probability and Statistics - Permutations and Combin - Practice'

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**2**

Calculate the probability of drawing 2 Clubs. Show as a fraction in binomial (bracket) notation

6 ♦	K ♣	Q ♠
8 ♣		

P(2 Clubs)

<b>a</b>	$\frac{\binom{2}{2}}{\binom{4}{2}}$	<b>b</b>	$\frac{\binom{2}{4}}{\binom{7}{4}}$
<b>c</b>	$\frac{\binom{2}{2}}{\binom{4}{2}}$	<b>d</b>	$\frac{\binom{4}{4}}{\binom{6}{6}}$

**4**

Calculate the probability of drawing 5 Diamonds. Show as a fraction in binomial (bracket) notation

4 ♦	4 ♠	9 ♦
A ♦	A ♦	4 ♣
A ♦		

P(5 Diamonds)

<b>a</b>	$\frac{\binom{5}{5}}{\binom{7}{5}}$	<b>b</b>	$\frac{\binom{5}{7}}{\binom{5}{5}}$
<b>c</b>	$\frac{\binom{7}{5}}{\binom{5}{5}}$	<b>d</b>	$\frac{\binom{7}{5}}{\binom{8}{5}}$

**6**

Calculate the probability of drawing 4 3s. Show as a fraction in binomial (bracket) notation

3 ♥	7 ♠	3 ♦
5 ♣	3 ♦	3 ♥

P(4 3s)

<b>a</b>	$\frac{\binom{8}{4}}{\binom{10}{4}}$	<b>b</b>	$\frac{\binom{6}{6}}{\binom{7}{6}}$
<b>c</b>	$\frac{\binom{4}{4}}{\binom{6}{4}}$	<b>d</b>	$\frac{\binom{6}{4}}{\binom{4}{4}}$

**1**

Calculate the probability of drawing 2 7s. Show as a fraction in binomial (bracket) notation

7 ♥	K ♥	7 ♦
8 ♦	5 ♠	

P(2 7s)

<b>a</b>	$\frac{\binom{4}{2}}{\binom{8}{2}}$	<b>b</b>	$\frac{\binom{4}{2}}{\binom{7}{2}}$
<b>c</b>	$\frac{\binom{2}{2}}{\binom{5}{2}}$	<b>d</b>	$\frac{\binom{2}{2}}{\binom{5}{2}}$
<b>e</b>	$\frac{\binom{5}{2}}{\binom{2}{2}}$		

**3**

Calculate the probability of drawing 4 7s. Show as a fraction in binomial (bracket) notation

7 ♣	7 ♦	6 ♣
A ♦	10 ♣	7 ♠
7 ♣		

P(4 7s)

<b>a</b>	$\frac{\binom{7}{4}}{\binom{4}{4}}$	<b>b</b>	$\frac{\binom{8}{4}}{\binom{11}{4}}$
<b>c</b>	$\frac{\binom{4}{4}}{\binom{7}{4}}$	<b>d</b>	$\frac{\binom{4}{7}}{\binom{4}{4}}$

**5**

Calculate the probability of drawing 3 5s. Show as a fraction in binomial (bracket) notation

9 ♠	Q ♦	7 ♥
5 ♦	5 ♠	5 ♠
8 ♠		

P(3 5s)

<b>a</b>	$\frac{\binom{6}{3}}{\binom{10}{3}}$	<b>b</b>	$\frac{\binom{3}{3}}{\binom{7}{3}}$
<b>c</b>	$\frac{\binom{3}{3}}{\binom{7}{3}}$	<b>d</b>	$\frac{\binom{7}{3}}{\binom{3}{3}}$

**7**

Calculate the probability of drawing 3 Clubs. Show as a fraction in binomial (bracket) notation

5 ♣	10 ♣	6 ♠
6 ♠	Q ♣	

P(3 Clubs)

<b>a</b>	$\frac{\binom{5}{3}}{\binom{3}{3}}$	<b>b</b>	$\frac{\binom{3}{3}}{\binom{5}{3}}$
<b>c</b>	$\frac{\binom{3}{3}}{\binom{5}{3}}$	<b>d</b>	$\frac{\binom{3}{5}}{\binom{3}{3}}$
<b>e</b>	$\frac{\binom{6}{3}}{\binom{8}{3}}$		