

XXX JAZNN  
 $\frac{12}{12}$   
 $\binom{4}{5} NNN$  JAZUUNU

Counting. pdf

def  
 cond

1)

~~case 1: 1u: 5!~~ case 2:  $2u: 4 \binom{5!}{2!} = 240$

case 3:  $3u: \binom{4!}{2!} \binom{5!}{3!} = 120$

Total sum =  $120 + 240 + 120 = 480$

prob  
 cond

2)

$\binom{13}{2} \binom{4}{2} \binom{11}{1} \binom{4}{1} = 123552$

max  
 cond

3)

6 couples (15 seq) 35853

4) (3) ← root

only 2 possibilities to left

12 Total

def  
 cond

1,2

4-8

10,11,12

only 5 partitions of (9) children 79

n

2

5

3

$\binom{4}{2} / 3$

$\binom{10}{5} / 6$

$\binom{6}{3} / 4$

$$\frac{2n(n-1)}{n+1}$$

product of these 3  
 $= 2 \binom{4}{2} \binom{5}{3} = 420$

def

prob  
 cond

5)

case 1: 9

case 2: 8

17 total