20 demono novigoren

D 47 11 12 oboga ubpum na ucasa ha cas nuovorus 12

Il 30 chase to cer nuclous 17

182 opideo pe es unimporner 13

Il 152 opiada pe m ma exanopeixoua

48.6. M 9.0 xiapos nibalvorneur cai A to enserguero va virtisoque 191 = (6) cai 1A1 = 1 = > PEAZ = IAI

$$\frac{(46)}{(46)} = \frac{(46)}{(46)}$$

13.9 Famo 3 0 richas Urganosalem He 0 anhearthante au sicent accental

13.1 = (18) = 18; = 1-3.4.2.6.4.8.8.10.11.12.13.14.12.18.14.18

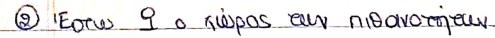
13.1 = (18) = 18; = 1-3.4.2.6.4.8.8.10.11.12.13.14.12.18.14.18

13.1 = (18) = 18; = 1-3.4.2.6.4.8.8.10.11.12.13.14.12.18.14.18

191=7.11.13.14.4.17.18

To enderchers A rai holoaguen oi activoers - 1 gocard of rails ohaga exer herpo 141=1.

 $P[A] = \frac{1A1}{121} \Rightarrow P[A] = \frac{(6!)^3}{18!}$





$$B = \{(1,1,1,1),(1,1,1,1),\dots,(1,1,1,1),\dots\}$$

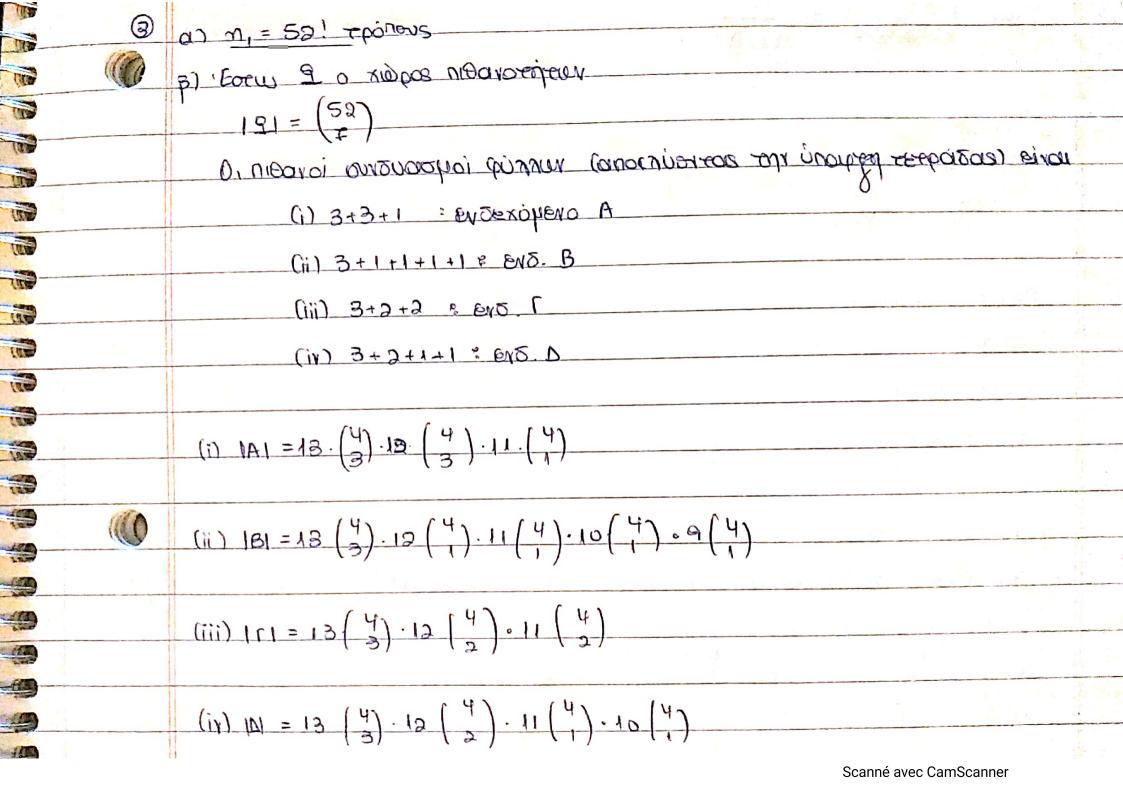
αι Έστω κ το εντεχώμενο να καπέβων όλοι στοι ίδιο όρωφο.

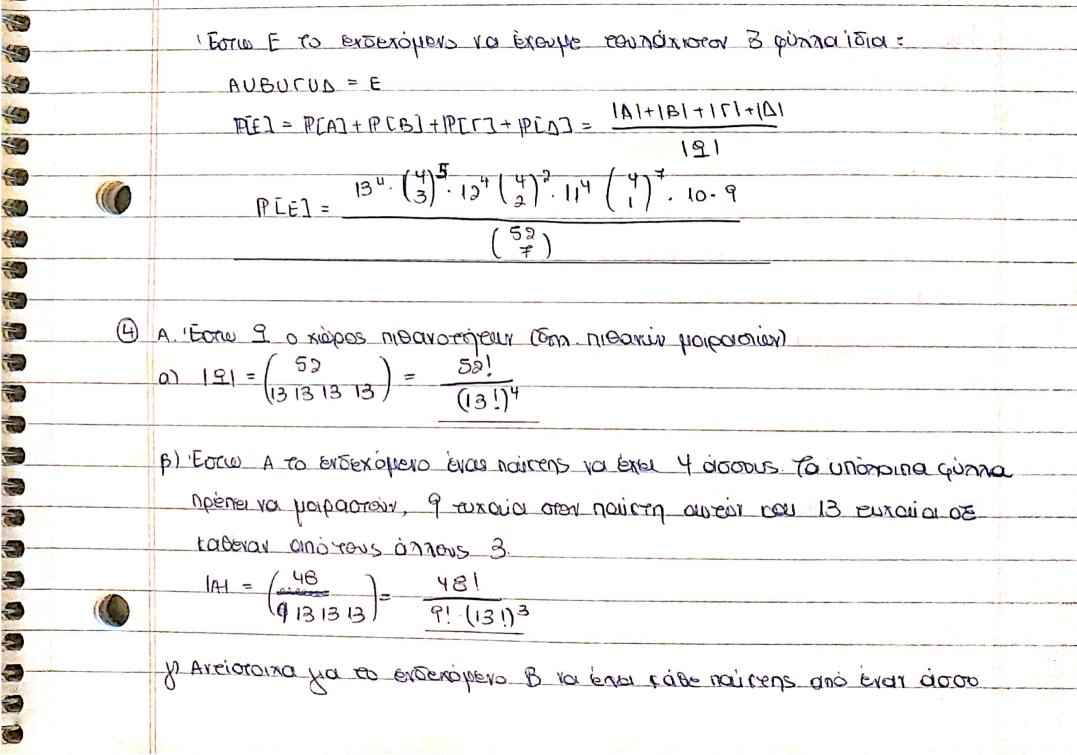
Toxies yo to evolution A voi careford onto as diapoperità opoque
$$A = Q - B$$
 =) $P[A] = P[Q] - P[B](a)$ $P[A] = I - \frac{1}{T}$

$$P[A] = \frac{G}{T}$$

N'Earm L'eo encexohero na tareben actibine a act igio obaço $111 = \pm \cdot 6 \cdot 5 + \pm \cdot 6$

δ) [εστω Δη πιθανότητα να τατέρουν τανλαχιστον δ ατον 1διο όροφο. $Δ = β - Γ = 1 β [β] = β [β] - β[Γ] = <math>\frac{1}{7} - \frac{6^3}{6^3} = \frac{73 - 6^3}{1510} = 49 - 36$







B. Eora 9 0 Napos AIBOITOTOCON.

a) Neava oevapa:

ÉCTU A TO OEVARO LA POIDACTON 4 IGIA

$$10 = 10 + 10 + 10 + 10 + 10 = 10 \cdot 10 \cdot (4) + 10 \cdot 10 \cdot (4) + 10 \cdot 10 \cdot (4) + 10 \cdot (4)$$

$$P(\Delta) = \frac{1\Delta 1}{121} - 1 P(\Delta) = \frac{18 \cdot 12 \binom{4}{5} + 18 \cdot 12 \binom{4}{5} + 18 \cdot 12 \cdot 11 \binom{4}{1}^{2}}{\binom{52}{5}}$$

 13.12(4) + 13.12 (7) + 13.12.11 (1)
$P[\Delta] = \frac{101}{191} - 1 P[\Delta] = \frac{13 \cdot 13(\frac{9}{3}) + 13 \cdot 12(\frac{9}{3}) + 13(\frac{1}{3}) + 13 \cdot 12 \cdot 11(\frac{1}{3})}{(\frac{52}{3})}$
 β) Λιθανά σενάζια:
(i) A: 3+8+1
(ii) B: 3+2+1+1
 (ii) T: 3+2+2
(iv) D: 3+1+1+1
έστω Ε το σενάρο να μοιραστούν ατριβιώς 3 ίδια φύπλα
 [E] = A + B + T + A =
= 13 (4) 12 (4) +13(4) +13(4) +13(4) -11(4) ·10(4) +13(4) -11(4)
+ 13 (4) - 12 (4) - 10 (4)
$P[E] = \frac{ E }{ \mathcal{Q} } = P[E] = \frac{13.12.11 (\frac{4}{3}) [\frac{4}{3}] (\frac{4}{1}) + (\frac{4}{2}) (\frac{4}{1})^{2} - 10 + (\frac{4}{2})^{2} + (\frac{4}{1})^{3} \cdot 10}{(\frac{52}{7})}$
$ f(E) = f(E) ^2 $



A Lour & so enserghers ha proste of divisor is so vibrates IAI = 4. (13)

$$P[A] = \frac{|A|}{|B|} \Rightarrow P[A] = \frac{4 \cdot {3 \choose 7}}{{53 \choose 7}}$$

(6) Form on to Jenjapia anoteneintal and areper can juvante $\frac{8!}{(2!)^4} = \frac{1.8.3.4.5}{93.8} = 3.4.5.6.7 = 1715$

Four 4 to Ergexations na hold spran takes he to Sontable ton



1000 des 6000 des 11 la :> 1 = 3a 1 - 2a > 2r - 1a → 3r - 4a → 4r - 3a 1 - 2a → 2r - 4a → 4r - 3a 4r - 3a 4r - 3a

3+3A - 3r = 4A - 4r - 2A - 4r - 2A - 4r - 4A - 3r - 4A - 4r - 4A

4-4A -> 4-3A -> 4-3A -> 4-3A -> 4-3A -> 4-3A -> 4-3A -> 4-3A

Scanné avec CamScanner

	40	- MA -> MC E	30 20-	3-20-40-30 3-13-10-40-6 3-20-40-	1 p
	ourenies IAI = 7			3 - 20 -4-	(A
	FLA) - (A) = 4 121 (7)	=> P[A] =	<u> </u> (6)4		
(3)	131 = 46				
	Datonoja	28 52405000ia	3º zarozoneio	4º pavotexeid	<u> </u>
	piavopan	Jarbon aid		napovcia	
	norbenaj or		napovoia	παρευσία	
		παρουσία	napovoia	Topovora	
	¢ced0	g000			
	to nanjens eur n	7			
	141 = 60.5.4	erczonia. IV A	to devatio ta	anoralism and 3	enty, were

PEAL	4.5.6 ³	5.6 ⁹	=> PCn]=	45
	40	40	Process Commence	-



x) 1º gerodoneio	2º Kenoganeja	3º gendoneia	48 gonotonsis
0 6	0	0	Bolo
reijos	Lenkoz	50lp	
Teglos	solo	Jeigos	sdo
Teolos	Solo	Solo	Tentos
Solo	180 for	Solo	Tentos
Solo	Solo	perios	Jenijos
solo	Zeijos	Jeijas	Solo

G of Libares taxanomes sixus 6.

The second response of the second respective of the second response of the second response

$$P[B] = \frac{1B1}{191} = \frac{3.6!}{46} \Rightarrow P[B] = \frac{3.6!}{2.46}$$

5 a 191 = 4!

Oscoparque ces distres apopulpieres ano las to, ea modera enterapera eivan .

V A= 1 cau B=t

VAEL COU B=1

V A,B & {2,..., t-1/ pe IA-BI=1

V A=1 (a) B=2

V A=2 cou B=1

9 Senv 3 repinewon, undiprour 26 nibares biarazers work 1A-BI=1

(theya A>B ray eninher theya A<B), onon the t-2

SUVERTICIO, OI A-B EXOVI SK-27+4 = 21 MBOVES TICHTOSES ONS ONDIES

Ecidorral Jinna. La rabellia ani auries, ol animolnol (t-2) capillerol inform

(1-2)! nibavies diarright 'Eron, ha to enderopiero A, a Arou B val

BREBENY OF BIRMAYES DEGED, IOXUEL : IAI = 21. (1-2)!

P[A] = 1A1 = 2 = (1-3)! = 2 = 2 = 2 = 2 = 121 = 2 = 121 = 2 = 121 = 2 = 121 =

B) Oμοια με το ερώντημα (α), το σενάριο στα οποία οι Α-β τάθονται δίπλα, είναι

V A=1 ται B=2

V A=3 ται B=1

V A, B ε {2, ..., t-1} με 1 A- B 1 = 1

Sureπώς μα το ενδεχόμενο B, οι Αται Β να βρεθούν σε διπλανέο θέσεις, ισχύει = 1 B1 = [2(t-2)+2] · (t-2)! = 2(t-i)·(t-2)!

P[β] = [B1 = 2(t-1)+t-3!] ⇒ P[β] = 2

[t-2](t-1) = 2(t-1) = 2(t