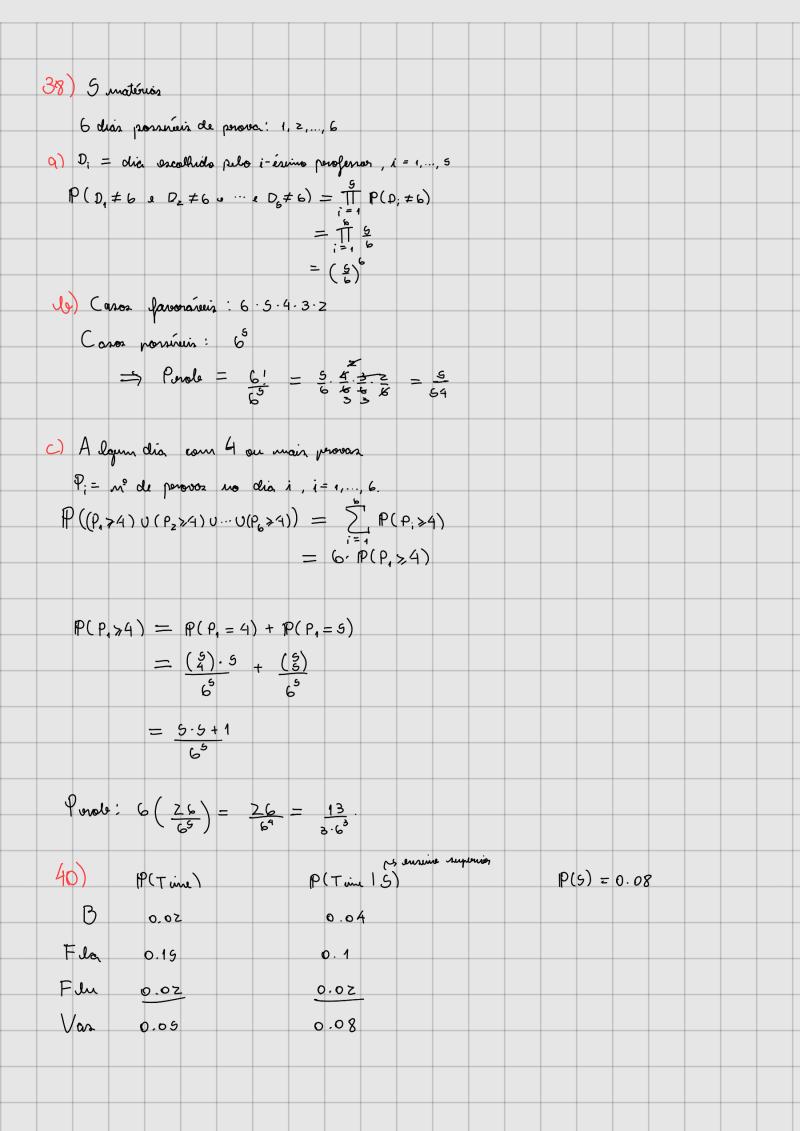
A possible : questive 37.35 a 40  10) Max => ten pole manon una jethe  plan    Plan plan    Min   = P(M in n h jethen)  plus    = P(in jethen)  = O 27  O 16 10 22 + 0.15 + 0.8 + 0.4 + 0.3 + 3.0 0.1  C ag = not de multiuser com de jethen  = p = not de jethen ete multiuser com de jethen  = p = not de jethen ete multiuser com de jethen  = p = not de jethen ete multiuser com de jethen  = p = not de jethen ete multiuser com de jethen  = p = not de jethen ete multiuser com de jethen  = p = not de jethen ete multiuser com de jethen  = p = not de jethen ete multiuser com de jethen  = p = not de jethen ete multiuser com de jethen  = p = not de jethen ete multiuser ete jethen ete jethen ete jethen ete multiuser ete jethen ete										
32) as 0 filhor - 0.29.  (b) Mai = tem pelo menon um filho  pelo pelo pelo pelo pelo pelo pelo pelo	A postila: que	nties 37	, 38 a 40							
(b) Max = tem pelo manor um gibbo  p(sight)  P(sighton) Max) = P(u an Abython)  p(Max)  = P(sighton)  P(Max)  = P(sighton)  = O.22  O.16+0.22+0.15+0.8+0.4+0.3+3-0.1  C) as = n² de sisten ate multipose your tim de gitton  = Fig = sighton  = sighton  = Fig = sighton  = sighton  = Fig = sighton										
(b) Max = tem pelo manor um gibbo  p(sight)  P(sighton) Max) = P(u an Abython)  p(Max)  = P(sighton)  P(Max)  = P(sighton)  = O.22  O.16+0.22+0.15+0.8+0.4+0.3+3-0.1  C) as = n² de sisten ate multipose your tim de gitton  = Fig = sighton  = sighton  = Fig = sighton  = sighton  = Fig = sighton	37) 20111	- 0.79								
= IP(de fillion)  IP(Max)  = P(de fillion)  = P(de fillio										
= IP(de fillion)  IP(Max)  = P(de fillion)  = P(de fillio	le) More ⇒ t	em pelo m	remos um fil	lho						
= IP(de fillion)  IP(Max)  = P(de fillion)  = P(de fillio	P( in gillion	Mãi) =	P(M & A de	. filhon	ter en flere	n c Mãi				
$=\frac{P(b_1 b_0)}{\sum_{i=1}^{n}P(i b_0)}$ $=\frac{P(b_1 b_0)}{(b+2z+15++1)}$ $=\frac{P(b_1 b_0)}{(b+2z+15++1)}$ $=\frac{P(b_1 b_0)}{(b+2z+15++1)}$ $=\frac{P(b_1 b_0)}{P(b_0)}$ $=\frac{P(b_0 b_0)}{P(b_0)}$ $=P$			P(M	<u>«د)</u>						
$=\frac{P(b_1 b_0)}{\sum_{i=1}^{n}P(i b_0)}$ $=\frac{P(b_1 b_0)}{(b+2z+15++1)}$ $=\frac{P(b_1 b_0)}{(b+2z+15++1)}$ $=\frac{P(b_1 b_0)}{(b+2z+15++1)}$ $=\frac{P(b_1 b_0)}{P(b_0)}$ $=\frac{P(b_0 b_0)}{P(b_0)}$ $=P$		=	IP ( on 1: glam)							
$=\frac{P(b_1 b_0)}{\sum_{i=1}^{n}P(i b_0)}$ $=\frac{P(b_1 b_0)}{(b+2z+15++1)}$ $=\frac{P(b_1 b_0)}{(b+2z+15++1)}$ $=\frac{P(b_1 b_0)}{(b+2z+15++1)}$ $=\frac{P(b_1 b_0)}{P(b_0)}$ $=\frac{P(b_0 b_0)}{P(b_0)}$ $=P$			IP(Mãi)							
$\sum_{i=1}^{\infty} P(i \text{ yillos})$ $= P(b \text{ yillos})$ $= (b+22+15++1)$ $= 0.72$ $P(2 \text{ yillos}   Mai) = 0.72$ $= 0.16+0.22+0.15+0.8+0.4+0.3+3\cdot0.4$ $P(2 \text{ yillos}   Mai) = 0.72$ $= 0.16+0.22+0.15+0.8+0.4+0.3+3\cdot0.4$ $P(2 \text{ yillos}   Mai) = 0.72$ $= 0.16+0.22+0.15+0.8+0.4+0.3+3\cdot0.4$ $P(3 \text{ yillos}   Mai) = 0.72$ $= 0.16+0.22+0.15+0.8+0.4+0.3+3\cdot0.4$ $= 0.72$ $= 0.72$ $= 0.72$ $= 0.72$ $= 0.73$ $= 0.74$ $=$										
$=\frac{P(2a_1)hoa}{16+2z+15+\dots+1}$ I are it maximpools as $e^{a_1}=z$ . $P(2_1)hoa   Mai   = 0.2z$ $O.16+0.2z+0.15+0.8+0.4+0.3+3.0.1$ $O a_{1a}=m^2 \text{ ole mulliures com in Julion}$ $F_{1a}=m^2 \text{ de Jilhon ole mulliures gue tâm in Julion}$ $\Rightarrow F_{3a}=ba a_{2a}$ Total de Julion = $\sum_{n=1}^{2} F_{2n}$ , $A=T$ otal de mulliures = $\sum_{n=1}^{\infty} a_{2n}$ $P(\text{Jilho winio}) = F_{1}$ $\sum_{n=1}^{\infty} F_{2n}$ $\Rightarrow a_{3n}=A \cdot p_{4n}$ $\Rightarrow F_{3n}=ba a_{4n}=9a \cdot A \cdot p_{4n}$										
The is maximized as $\ln = 2$ . $F(2) \text{ fellow }   Max   = 0.22$ $0.16+0.22+0.15+0.8+0.4+0.3+3.0.1$ C) $\alpha_{11} = m^{2}$ de filher de mulliure que têm le filher $F_{12} = m^{2}$ de filher de mulliure que têm le filher $F_{13} = 4 \cdot \alpha_{14}$ $Total de filher = \sum_{limin = 1}^{2} F_{15},  A = Total de mulliures = \sum_{limin = 1}^{2} \alpha_{21}$ $P( \text{ filhe unice}) = F_{1}$ $\sum_{limin = 1}^{2} F_{12}$ $F_{22} = 4 \cdot \alpha_{14}$ $F_{23} = 4 \cdot \alpha_{14}$ $F_{24} = 4 \cdot \alpha_{14}$ $F_{25} = 4 \cdot \alpha_{15} = 4 \cdot \alpha_{15}$ $F_{25} = 4 \cdot \alpha_{15} = 4 \cdot \alpha_{15}$ $F_{25} = 4 \cdot \alpha_{15} = 4 \cdot \alpha_{15}$ $F_{25} = 4 \cdot \alpha_{15} = 4 \cdot \alpha_{15}$			\-\							
I are it maximyoolo se in = 2. $F(2) \text{ filter }   Max) = 0.22$ $0.16+0.22+0.15+0.8+0.4+0.3+3.0.4$ $C) \alpha_{10} = n^{2} \text{ cle mullives com in filter} F_{12} = n^{2} \text{ de filher cle mullives que têm in filler} \Rightarrow F_{31} = \text{le } \alpha_{32} Total de filar = \sum_{3n=1}^{2} F_{4n},  A = Total de mullives = \sum_{3n=1}^{2} \alpha_{3n} P(\text{filho since}) = F_{4n} P_{3n} = A \cdot p_{4n} P_{4n} = A \cdot p_{4n}$		=	_	_						
P(2)  fellon    Max   = 0.22 $0.16+0.22+0.15+0.8+0.4+0.3+3.0.1$ $P(2)  and  m  of mullives com in fillion$ $P(3)  and  m  of mullives$ $P(4)  and$			16+22+15+	+1						
P(2)  fellon    Max   = 0.22 $0.16+0.22+0.15+0.8+0.4+0.3+3.0.1$ $P(2)  and  m  of mullives com in fillion$ $P(3)  and  m  of mullives$ $P(4)  and$	4-									
O. 16+0.22+0.15+0.8+0.4+0,3+3.0.1  C) $\alpha_{1} = n^{\circ}$ de mulliures com la fillion $F_{11} = n^{\circ}$ de filhos de mulliures que tân la fillion $F_{21} = la \cdot \alpha_{la}$ Total de filhos = $\sum_{n=1}^{\infty} F_{2n}$ , $A = Total de mulliures = \sum_{n=1}^{\infty} \alpha_{2n} P(filho uívico) = F_{1} \sum_{n=1}^{\infty} F_{1a} Perob (la filhos) = \alpha_{11} \Rightarrow \alpha_{12} = A \cdot p_{21} F_{22} = la \cdot \alpha_{21} = la \cdot A \cdot p_{22}$										
O. 16+0.22+0.15+0.8+0.4+0,3+3.0.1  C) $\alpha_{1} = n^{\circ}$ de mulliures com la fillion $F_{11} = n^{\circ}$ de filhos de mulliures que tân la fillion $F_{21} = la \cdot \alpha_{la}$ Total de filhos = $\sum_{n=1}^{\infty} F_{2n}$ , $A = Total de mulliures = \sum_{n=1}^{\infty} \alpha_{2n} P(filho uívico) = F_{1} \sum_{n=1}^{\infty} F_{1a} Perob (la filhos) = \alpha_{11} \Rightarrow \alpha_{12} = A \cdot p_{21} F_{22} = la \cdot \alpha_{21} = la \cdot A \cdot p_{22}$	PC	2 fellos 1	Mar \ =	0.22						
Fig = no de filhon de mulheres que ten de filhos  Fig = la · a ea  Total de filhon = \$\frac{2}{3a_1} \cdot \frac{1}{3a_2} \cdot 1				0.16+0.22+0	0.15+0.810	.4+0,3+3	0.1			
Fig = no de filhon de mulheres que ten de filhos  Fig = la · a ea  Total de filhon = \$\frac{2}{3a_1} \cdot \frac{1}{3a_2} \cdot 1		• 00 · 00 · 0	00	9:10.	7					
Total de Jelhon = $\sum_{n=1}^{9} F_{n}$ , $A = Total de mulheres = \sum_{n=1}^{\infty} \alpha_{n}.  P( filho uíxio) = F_{n}  Porob (la felhon) = \frac{\alpha_{n}}{A} \Rightarrow \alpha_{n} = A \cdot p_{n} A = Total de mulheres = \sum_{n=1}^{\infty} \alpha_{n} A = Total de mulheres = \sum_{n=1}^{\infty} \alpha_{n}$						ls = 0,1,,	9			
Total de Jelhon = $\sum_{n=1}^{9}$ , $F_{n}$ , $A = Total de mulheres = \sum_{n=1}^{\infty} a_{n}  P( filho unico) = F_{n} \sum_{n=1}^{9} F_{n}  Penole (in filhon) = a_{n} \Rightarrow a_{n} = A \cdot p_{n} A = Total de mulheres = \sum_{n=1}^{\infty} a_{n} A = Total de mulheres = \sum_{n=1}^{\infty} a_{n}$			sle mulheres	que lem In	fillion	)				
P( filho uínio) = F <sub>1</sub> Porob (la filhon) = $\alpha_{11} = A \cdot p_{14}$ $A \Rightarrow F_{14} = A \cdot \alpha_{14} = b \cdot A \cdot p_{14}$										
P( filho uínio) = F <sub>1</sub> Porob (la filhon) = $\alpha_{11} = A \cdot p_{14}$ $A \Rightarrow F_{14} = A \cdot \alpha_{14} = b \cdot A \cdot p_{14}$	Total de S	thor = 3	F <sub>a</sub> , A	= Total de	urulheres =	5 an				
Porob (b. filhor) = $\frac{\alpha_{11}}{A}$ $\Rightarrow \alpha_{12} = A \cdot p_{14}$ $\Rightarrow F_{14} = 1 \cdot \alpha_{14} = 1 \cdot A \cdot p_{14}$	P( hilho	único) =	. =,							
Porob (b. filhor) = $\frac{\alpha_{11}}{A}$ $\Rightarrow \alpha_{12} = A \cdot p_{14}$ $\Rightarrow F_{14} = 1 \cdot \alpha_{14} = 1 \cdot A \cdot p_{14}$			Ž F							
	Yord (h g	lhor) =	$\frac{\alpha_{\theta_2}}{\alpha_{\theta_2}} \Longrightarrow c$	n = A. pu						
$P(\text{fills umico}) = \frac{A \rho_{1}}{\frac{2}{5} \cdot h \cdot A \cdot \rho_{1}} = \frac{0.16}{0.0.25, -1.0.16 + 2.0.22 + \cdots + 9.0.1}$ $\frac{1}{90.11} \cdot h \cdot \rho_{1} = \frac{0.16}{0.0.25, -1.0.16 + 2.0.22 + \cdots + 9.0.1}$	Pu		^ ⇒ F	1 = h-a =	· la · A pla					
$P(\text{fillio unico}) = \frac{A \rho_1}{\sum_{i=1}^{9} l_{i} \cdot A \cdot \rho_{i}} = \frac{0.16}{0.0.2c1.0.16 + 2.0.22 + \cdots + 9.0.1}$										
2 · β <sub>1</sub> · Λ· ρ <sub>1</sub>		PCLL	= (منسنه)	A o			0.11			
		, Cyv		9 h. A. 12.	= 77			44 12 0 22	<b>10.04</b>	
				0h=1	Bo_=-	* <del>*</del> 's	0 0,2,- 1,0,	16+2.0.22	4.0.1	



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a) 1-0.02-0.19-0.07-0.05 = 0.66 (?)
(b) P(Flans) = P(Flans).P(5)
                = 0.1 \cdot 0.08 = 0.008
c) P(51Flu) = P(Flus). P(5)
                       P(Flu)
              = 0.02 · 0.08
                      0.02
             \pm 0.08
   P(S|B) = P(B|S) \cdot P(S)
                     P(B)
           = 0.04.0.08
           = 0.16
                         ~ 1P(Fla) = P(Fla n5) + P(Fla n5°)
d) P(Fla | 5^c) = P(Fla | 5^c)
P(5^c)
                  = P(Fla)-P(Flans)
                           1- P(5)
                = P(Fla) - P(Fla 15) . P(5)
                           1- P(5)
                = 0.15 - 0.1 \cdot 0.08
               = 0.15 - 0.008
0.92
               = 0.142
               -\frac{142}{970} = \frac{71}{460}
e) P(Flu 15) = IP(Flu 15). P(5)
               = P(Flu). P(s)
    => Flu & 5 vão independentes
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