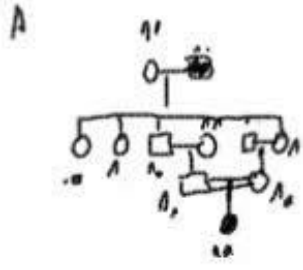
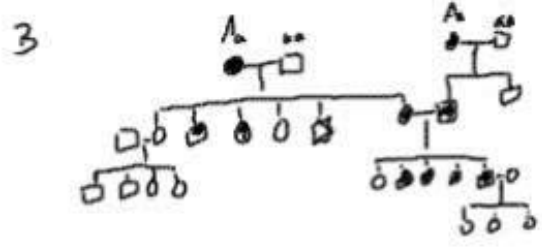


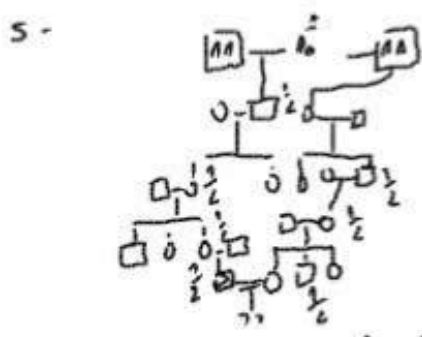
Problem 1 02/25/06



Condição anormal e recessiva



Condição anormal e dominante



	A	a	
A	AA	Aa	1/2
a	Aa	aa	1/2

A ₁	A ₂	a
A	A ₁	A ₂
a	A ₁	A ₂

$\frac{1}{16} = \left(\frac{1}{2} \cdot \frac{1}{2} \cdot \frac{1}{2} \cdot \frac{1}{2}\right)$ - probabilidade de 2 filhos aa
 probabilidade de ambos os pais serem Aa

$AA \cdot Aa \cdot Aa$
 $\frac{1}{4} \cdot \frac{1}{2} \cdot \frac{1}{2}$

Problem 2

a) $\frac{600}{1000} \cdot \frac{900}{1000} \cdot \frac{10}{1000} = 0,0054 = 0,01$

b) $\frac{400}{1000} \cdot \frac{100}{1000} \cdot \frac{990}{1000} = 0,0396 = 0,04$

c) $\frac{600}{1000} \cdot \frac{10}{1000} \cdot \frac{100}{1000} = 0,0006 = 0,001$

d) $\frac{600}{1000} \cdot \frac{100}{1000} \cdot \frac{990}{1000} = 0,0594 = 0,06$

e) $\left(\frac{600}{1000} \cdot \frac{100}{1000} \cdot \frac{990}{1000}\right) + \left(\frac{900}{1000} \cdot \frac{400}{1000} \cdot \frac{990}{1000}\right) + \left(\frac{400}{1000} \cdot \frac{900}{1000} \cdot \frac{10}{1000}\right) = 0,4162 = 0,42$

f) 1 - 0,42

z = 2: vermellha
 a: branca

22, 2n: vermellha
 n: branca

z	n	
N	0	$(\frac{3}{4})^N$
N-1	1	$(\frac{3}{4})^{N-1} \cdot (\frac{1}{4})$
N-2	2	$C_2 = (\frac{3}{4})^{N-2} \cdot (\frac{1}{4})^2$
...	...	
N-N	N	

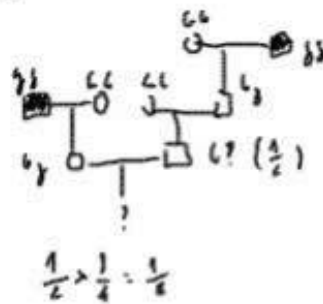
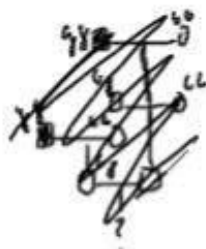
2) (ja menor 1 branca) = $1 - (\frac{3}{4})^N$

$1 - (\frac{3}{4})^N > 0.95$

$(\frac{3}{4})^N > 0.05$

$N \log 0.75 = \log 0.05 \quad N = \frac{\log 0.05}{\log 0.75} = 10.4$

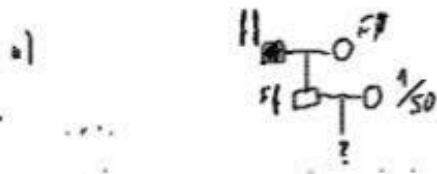
3.



galactosemia = gg

$\frac{1}{2} > \frac{1}{4} = \frac{1}{8}$

4. ff = fura quística



⊙

b) P(1ª criança) = $\frac{1}{4} > \frac{1}{50} = \frac{1}{250}$

c) P(2ª criança normal) = $\frac{3}{4}$

↳ como a 1ª criança teve a doença, a mãe e ff

S- PTC → S, n
 ↳ n, n

S: n, n?	423	724	130
S: n, n?	241	483	218
S: n, n?	16	3	218