



DEAFNESS (Page 22, Task 21 (old), Page 28, Task 21(new))

Pedigree:

Risk:

LINKAGE IN GENETIC COUNSELING (Page 22, Task 22 (old book only))

Father: A3A26B12B17

mother: A10A26B18B40

daughter with AGS: A3A26B17B40

Healthy homozygote

Heterozygote

Homozygote with AGS

COLOUR BLINDNESS (Page 19, Task 11 (old), Page 24, Task 11(new))

Pedigree:

Genotypes:

Risk:

a)

b)

COLOUR BLINDNESS (no book)

The colour blind mother and the father with normal colour vision have a son with normal vision whose karyotype is 47,XXY. Both parents have normal karyotype. In which parent and at which meiotic division did nondisjunction occur?

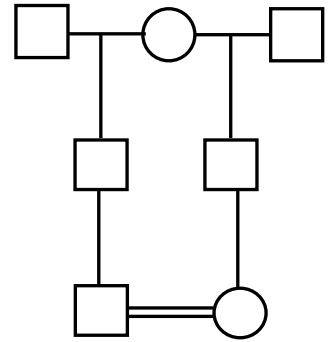
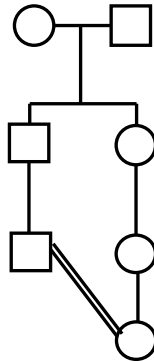
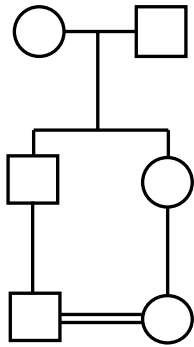
(Write all possible explanations)

rg – mutant allele

+ - wild (normal) allele



CONSANQUINEOUS MARRIAGE (Page 21, Task 16 (old), Page 26, Task 16(new))



Coefficient of consanguinity

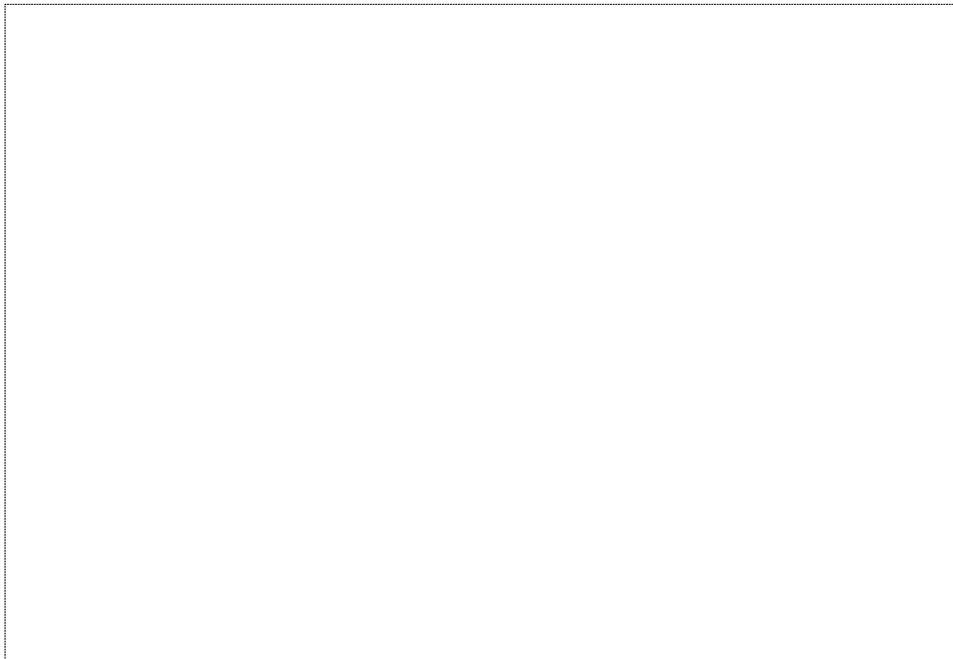
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HYPERPHENYLALANINEMIA

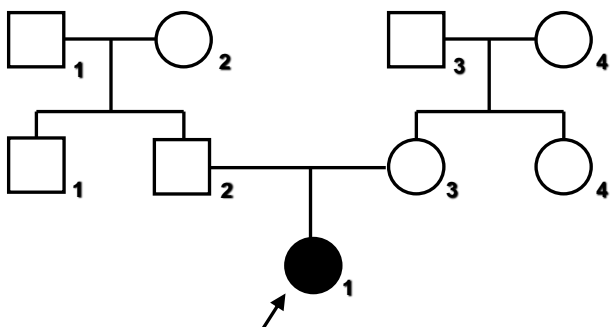
(Page 21, Task 19 (old), Page 27, Task 19 (new))

Pedigree:



Result:

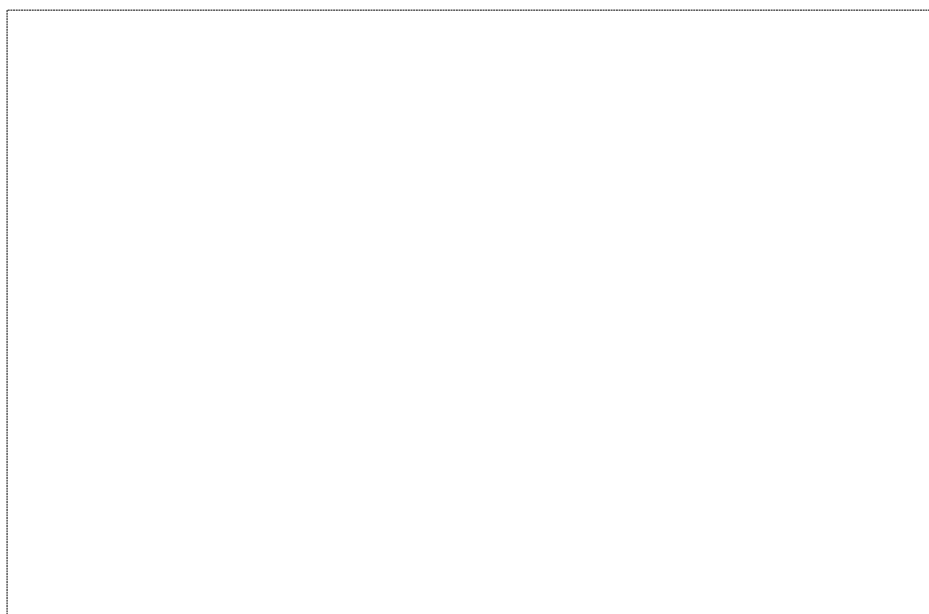
EVALUATE THE POSSIBILITY OF DIFFERENT MODES OF INHERITANCE (Page 16, Task 4 (old)Page 21, Task 4 (new))





HAEMOPHILIA A (Page 18, Task 10 (old) Page 24, Task 10 (new))

Pedigree:



Result:

- a)
- b)
- c)

NEURAL TUBE DEFECT (NTD) (Population frequency = 0,0009)

Page 94, Task 9 (old) Page 85, Task 6 (new)

Pedigree:

Result:

- a)
- b)
- c)
- d)