Answers Chp 14 Patterns of Heredity Worksheet

8. 4
9. father, #2
10. #1
11. 3 – individual #7
12. 4
13. yes
14. no
15. Individuals 8 & 9

1. Bert (also Fred & David)
2. 3
3. cousins
4. Fred & David
5. niece
6. nephew
7. aunt

The Walhberg Family & Hairy Feet

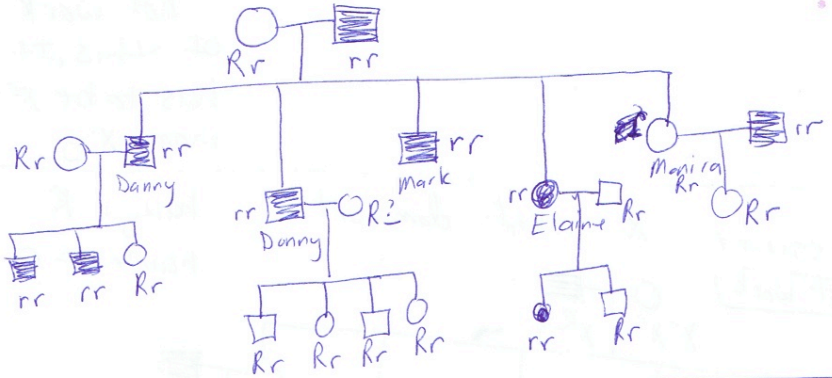
This trait could be autosomal recessive or autosomal dominant. It can not be x-linked recessive or x-linked dominant

Wallberg Family + Hairy Feet

The trait can be recessive or dominant (autosomal).
It works with both.

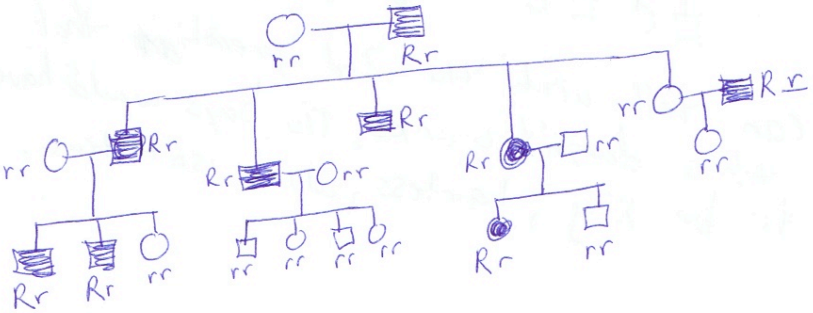
① Assume the trait is recessive — It works

hairy feet = r
(hairless) non hairy feet = R



② Assume the trait is dominant — It works

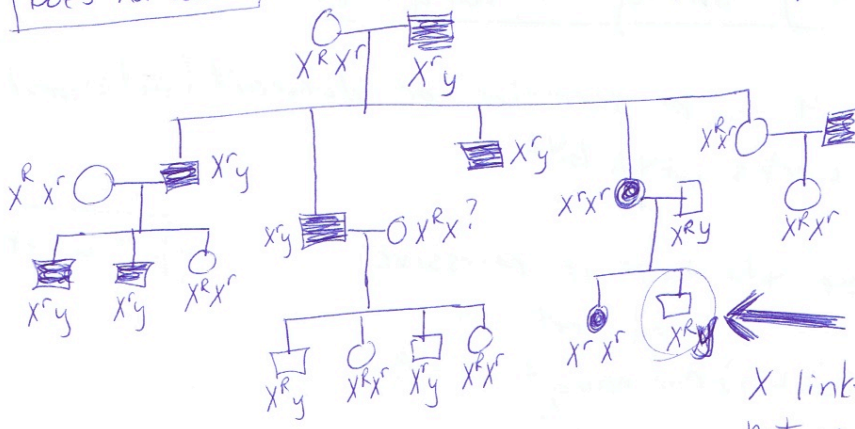
hairy feet = R
(hairless) = r



③ Assume X linked recessive — Does not work

hairy = X^R

hairless = X^r



X linked does not work because of this, It has to be X^r from mom - X^ry

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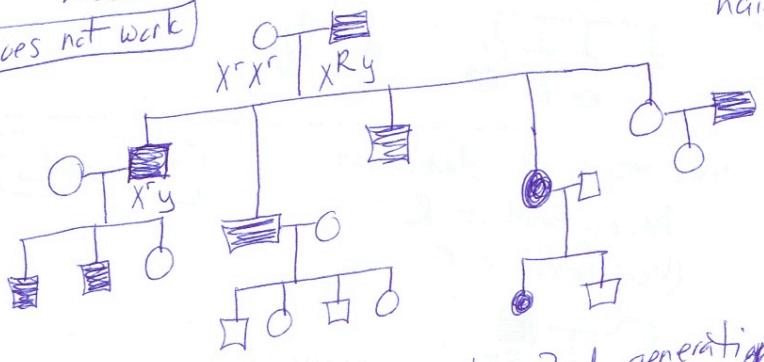
④ Assume X linked dominant — Does not work

hairy = R

hairless = r



You can tell with the 2nd generation that this doesn't work. The boys would have to be X^ry, hairless, which isn't true.