Pedigrees Practice

Name_____

In humans, albinism is a recessive trait. The disorder causes a lack of pigment in the skin and hair, making an albino appear very pale with white hair and pale blue eyes. This disorder also occurs in animals, a common albino found in a laboratory is the white rat. The pedigrees below trace the inheritence of the allele that causes albinism.

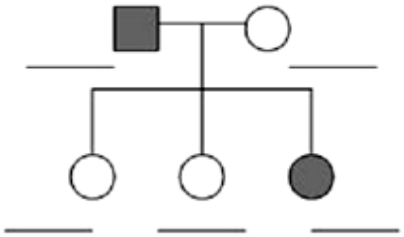
1. Given the following genotypes, describe the phenotypes (normal or albino)

AA = _____

Aa = _____

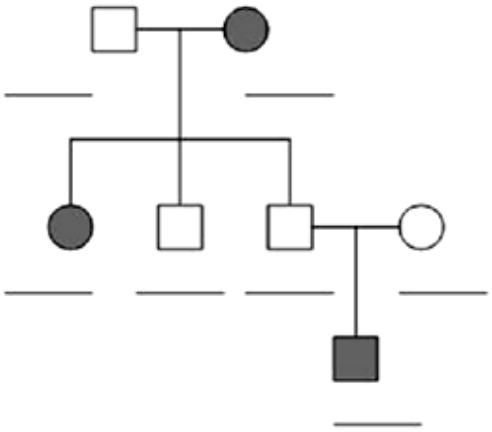
aa = _____

2. Fill out the blanks on the pedigree below.



3. How many children does this family have? _____
What are the sexes of the children? _____

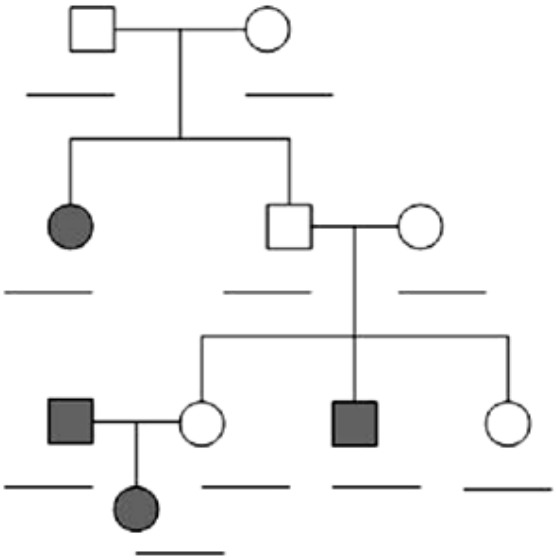
4. Fill out the blanks of the pedigree below (AA, Aa, or aa)

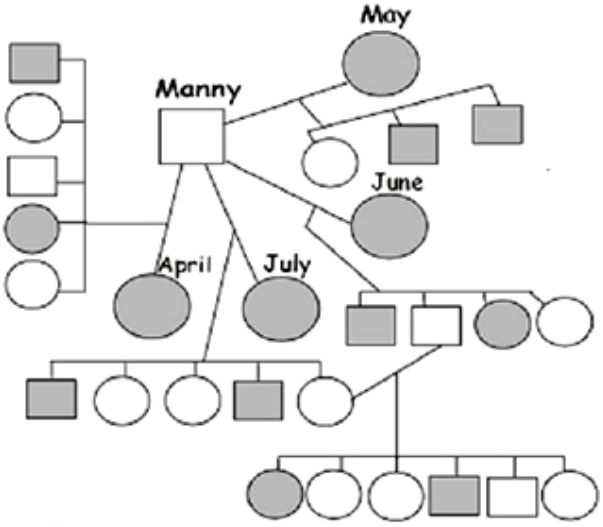


5. How many children does the original couple have? ___

6. How many grandchildren does the original couple have? ____
What is the sex of the grandchild? ____

7. Fill out the blanks of the pedigree below (AA, Aa, aa)



8. How many children does the original couple have? ____
9. How many grandchildren? _____

10. Rats can produce a lot more offspring than humans, making a pedigree more difficult to manage. A researcher has four female white rats named April, May, June, and July. One night, the cage was left open in the lab and a brown rat got into the female's cage. Six weeks later, the rats had litters of babies of varying colors. Two of the offspring managed to reproduce before the researcher was able to sort out the mess. Determine genotypes of the rats in this pedigree.