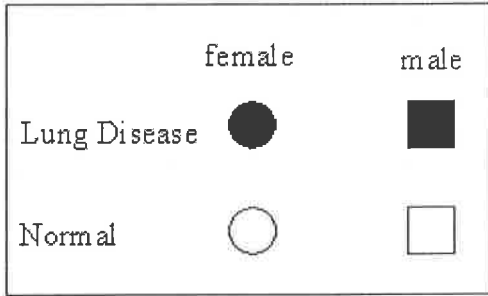


Pedigree Problem 1:

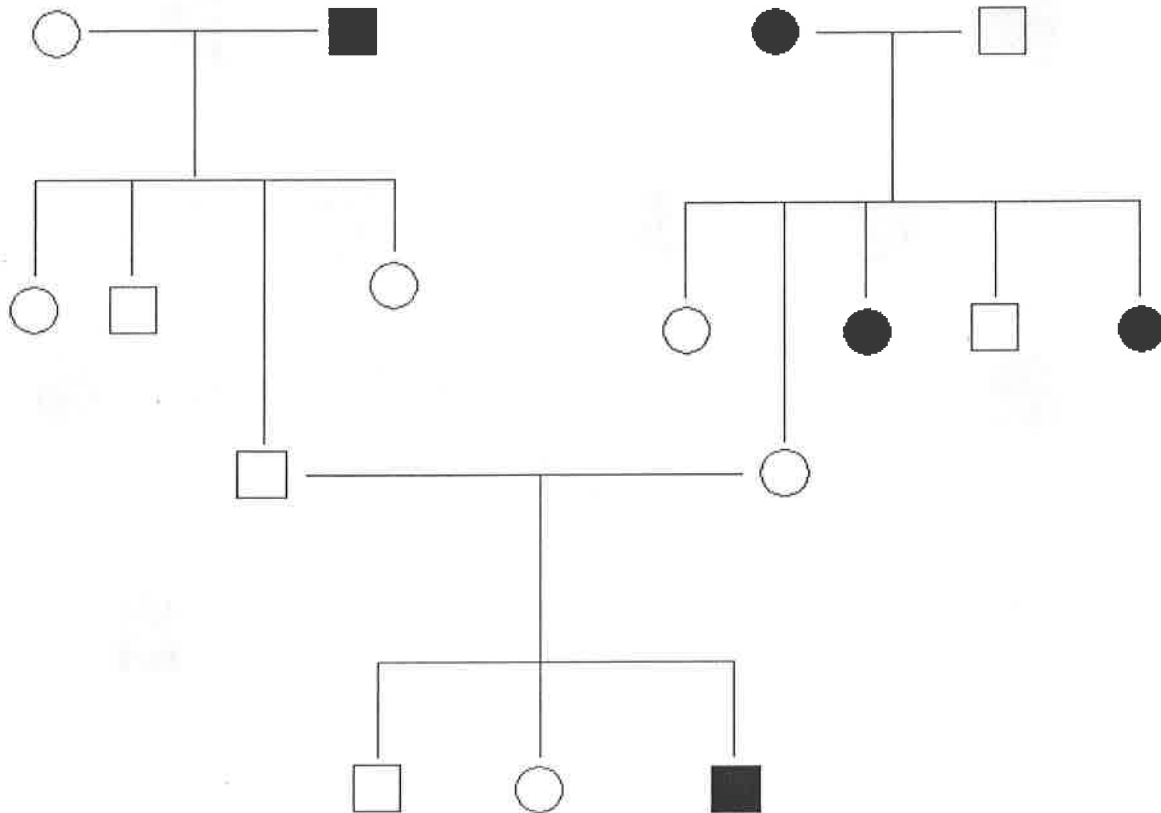
Below is a pedigree for an inherited lung disease. Provide the genotypes of each of the individuals.

Key:



A = normal
a = disease

Choose: $\left\{ \begin{array}{l} AA \\ Aa \\ aa \\ A? \end{array} \right.$



Pedigree Problem

Biology I

Hemophilia is a sex-linked recessive trait. The gene for this trait lies on the X chromosome. Recall that females are XX and males are XY. Therefore, hemophilia is much more common in males because they only need to inherit 1 copy of the recessive allele to express the disease. Females must inherit 2 copies of the recessive allele to express the disease. If they inherit only 1 copy of the recessive allele, they will be a carrier of the disease but it will not be expressed in them.

X^N = normal blood clotting

X^n = hemophilia

$X^?$ = unknown

Label the following pedigree with the genotypes of each individual.

