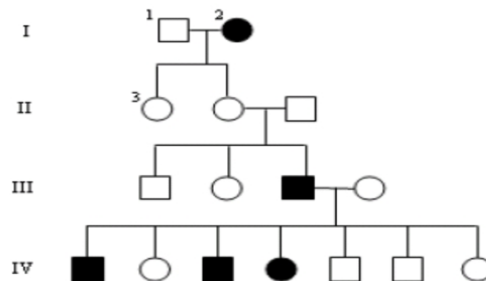


Pedigree Worksheet

KEY KEY KEY KEY KEY KEY

Interpreting a Human Pedigree

Use the pedigree below to answer 1-5



1. In a pedigree, a square represents a male. If it is *darkened* he has *hemophilia*; if *clear*, he had normal blood clotting.

- a. How many males are there? **8**
- b. How many males have hemophilia? **3**

2. A circle represents a female. If it is *darkened*, she has *hemophilia*; if *open* she is normal.

- a. How many female are there? **8**
- b. How many females have hemophilia? **2**

3. A marriage is indicated by a horizontal line connecting a circle to a square.

- a. How many marriages are there? **3**

4. A line perpendicular to a marriage line indicates the offspring. If the line ends with either a circle or a square, the couple had only one child. However, if the line is connected to another horizontal line, then several children were produced, each indicated by a short vertical line connected to the horizontal line. The first child born appears to the left and the last born to the right.

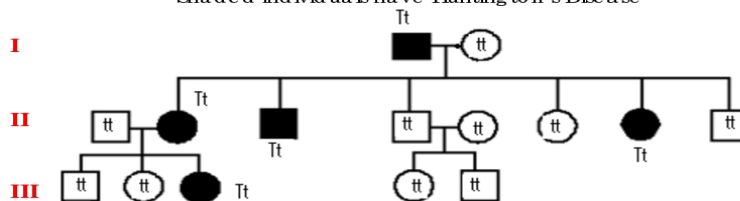
- a. How many children did the first couple (couple in row I) have? **2**
- b. How many children did the third couple (couple in row III) have? **7**

5. Level I represent the first generation, level II represents the second generation.

- a. How many generations are there? **4**
- b. How many members are there in the fourth generation? **7**

Use the pedigree below to answer 6-12

Shaded individuals have Huntington's Disease



Individuals are numbered for each generation right to left...they are denoted with the ir generation and the ir number. See #7 for example.

- 6. Write the generation on the pedigree numbers (roman numerals).
- 7. Which members of the family above are afflicted with Huntington's Disease? **I-1, II-2, II-3, II-7, III-3**
- 8. There are no carriers for Huntington's Disease - you either have it or you don't. With this in mind, is Huntington's disease caused by a dominant or recessive trait? **dominant**
- 9. How many children did individuals I-1 and I-2 have? **6**