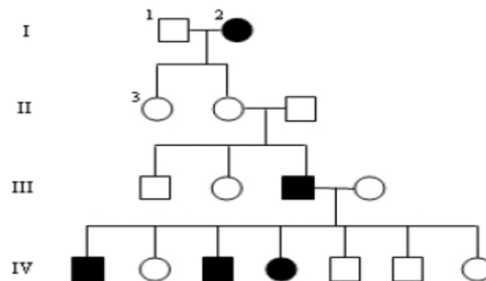


Pedigree Worksheet

KEY KEY KEY KEY KEY KEY

Interpreting a Human Pedigree

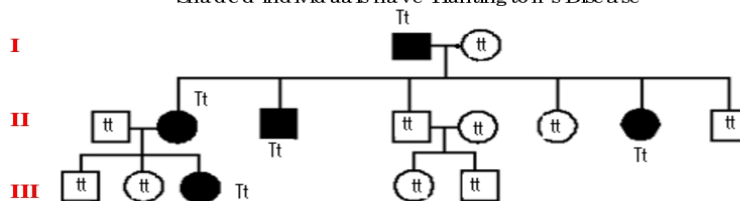
Use the pedigree below to answer 1-5



- In a pedigree, a square represents a male. If it is *darkened* he has *hemophilia*; if *clear*, he had normal blood clotting.
 - How many males are there? **8**
 - How many males have hemophilia? **3**
- A circle represents a female. If it is *darkened*, she has *hemophilia*; if *open* she is normal.
 - How many female are there? **8**
 - How many females have hemophilia? **2**
- A marriage is indicated by a horizontal line connecting a circle to a square.
 - How many marriages are there? **3**
- 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.
 - How many children did the first couple (couple in row I) have? **2**
 - How many children did the third couple (couple in row III) have? **7**
- Level I represent the first generation, level II represents the second generation.
 - How many generations are there? **4**
 - 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.

- Write the generation on the pedigree numbers (roman numerals).
- Which members of the family above are afflicted with Huntington's Disease? **I-1, II-2, II-3, II-7, III-3**
- 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**
- How many children did individuals I-1 and I-2 have? **6**