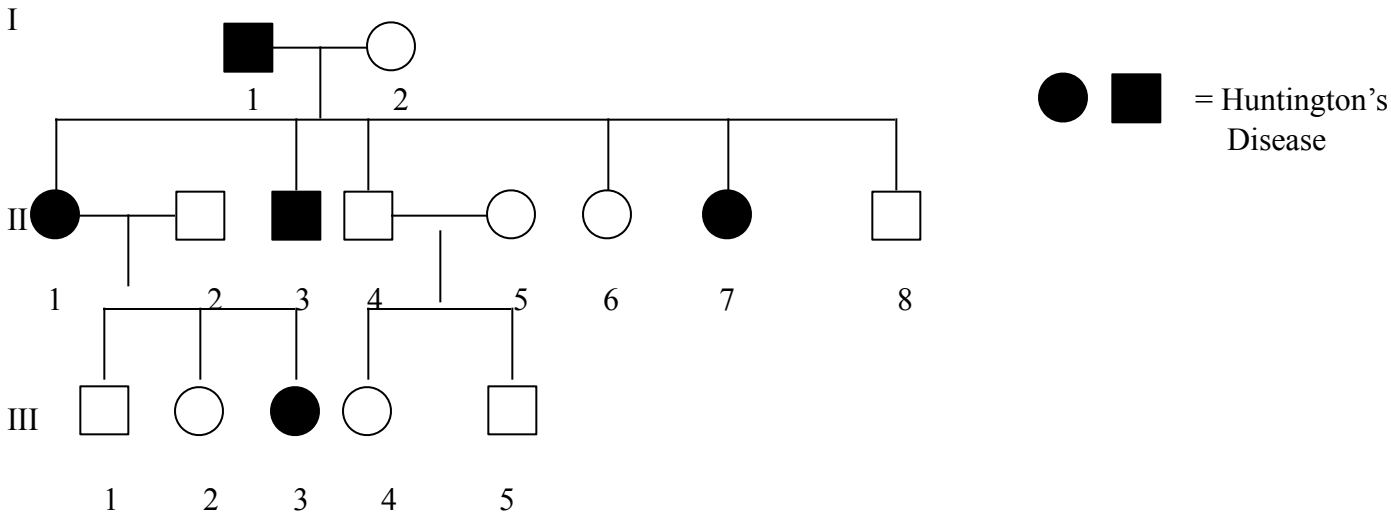


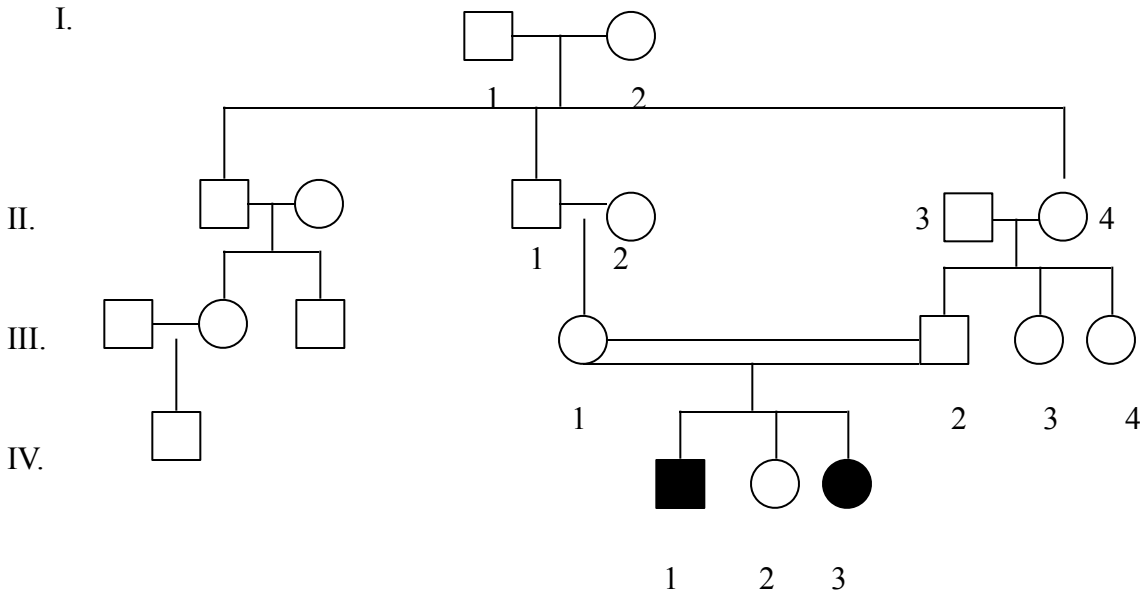
## Pedigree Worksheet 2

### Problem 1:



1. Which members of the family above are affected with Huntington's disease? \_\_\_\_\_
2. There are no carriers for Huntington's disease, you either have it or you don't. Is Huntington's disease caused by a dominant or recessive trait? \_\_\_\_\_
3. How many children did individual's I-1 and I-2 have? \_\_\_\_\_
4. How many girls did II-1 and II-2 have? \_\_\_\_\_ How many have Huntington's disease? \_\_\_\_\_
5. How is individual III-2 and II-4 related? \_\_\_\_\_ I-2 and III-5? \_\_\_\_\_

### Problem 2:



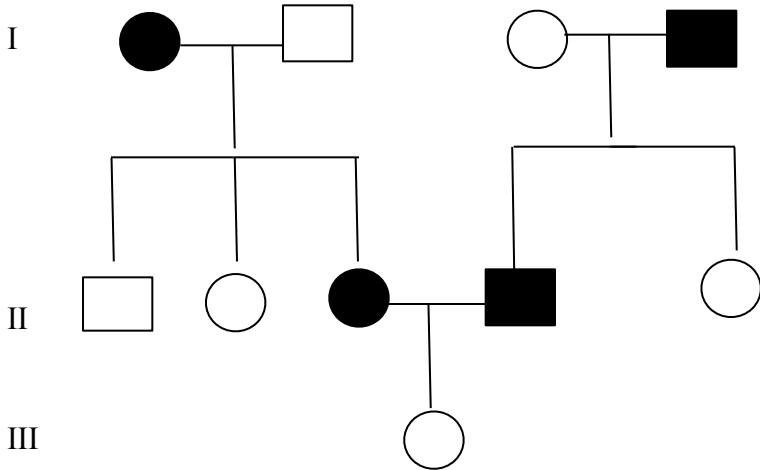
1. The pedigree above shows the passing of Hitchhiker's thumb in a family. Is this trait dominant or recessive? \_\_\_\_\_
2. How do you know? \_\_\_\_\_
3. How are individual's III-1 and III-2 related? \_\_\_\_\_
4. Name 2 individuals that have hitchhiker's thumb: \_\_\_\_\_
5. Name 2 individuals that are carriers of hitchhiker's thumb: \_\_\_\_\_

### Problem 3:

Do a pedigree for the following:

- A. Joe marries Sue; they are carriers for the jumping disease. They have 4 kids: Jack, Zack, Luke, and Sara. Zack and Sara have the jumping disease (recessive). Jack marries Amy, she has the disease. They have Lorie, who is also affected. Sara marries Dan who is a carrier for the disease. Sara is pregnant.
- B. What are the chances of Sara and Dan having a baby with the jumping disease?

Problem 4:



The following passage describes the family shown in the Pedigree above:

Although Jane and Joe Smith have dimples, daughter, Clarisse does not. Joe's dad has dimples, but his mother and his sister, Grace, do not. Jane's dad, Mr. Renaldo, her brother, Jorge, and her sister Emily, do not have dimples but her mother does.

1. Write the name of each person below the correct shape in the Pedigree above, along with **possible genotypes**.
2. How are marriage and offspring symbolized?
3. What do the Roman numerals symbolize?

Problem 5:

Make a pedigree based on the following passage about freckles. Write the name of each person below the correct shape, along with **possible genotypes**.

Andy, Penny, and Gilbert have freckles, but their mother, Mrs. Smith does not. Mrs. Robles (Mrs. Smith's sister), has freckles, but only one of her parents, Mr. Garcia has freckles, Denise and Darline Robles are freckled, but their sister, Dixie, like her father is not freckled.

Problems 4 and 5 courtesy of [www.bhs.jordon.k12.ut.us/~science/genetics/humgen.htm](http://www.bhs.jordon.k12.ut.us/~science/genetics/humgen.htm)