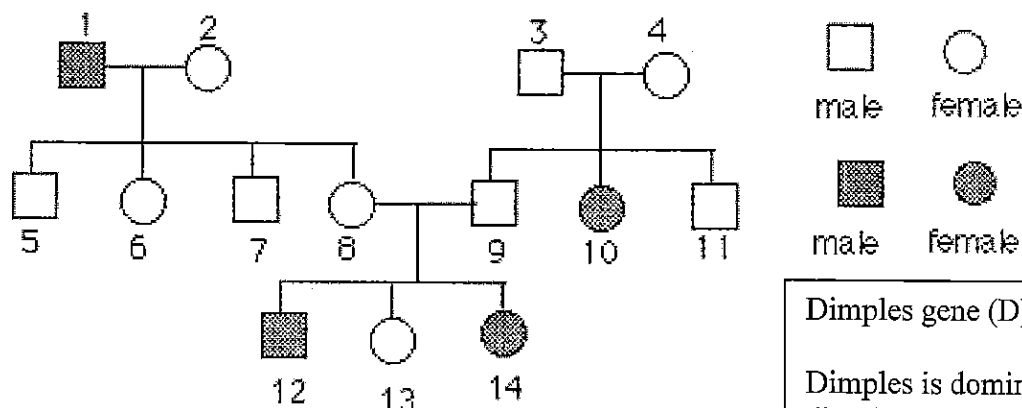


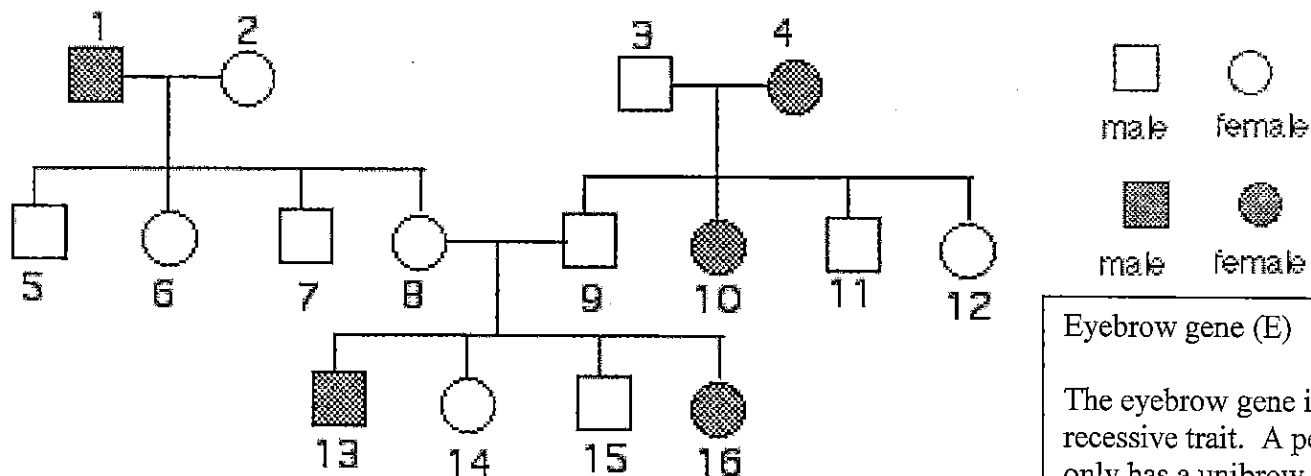
Genetics Pedigree Worksheet

1. Use the below pedigree chart to answer the following questions about dimples. The Dimple gene controls whether a person has dimples or doesn't have dimples. Dimples is dominant to no dimples. Place the genotypes of each individual below its symbol.



- A) How many family members have Dimples?
- B) What is the genotype of individual #3 and 4?
- C) Can either individual #8 or 9 be homozygous?
- C) Explain the family relationship that #12 has with # 2.

2. Use the below pedigree chart to answer the following three questions about unibrows. A person can either have two eyebrows or one fused eyebrow called a unibrow. The Eyebrow gene codes for which type of eyebrows a person will have. NOTE: this is a **Recessive Trait**- Which mean for a person to be affected they must have two recessive alleles. Place the genotypes of each individual below its symbol.



Eyebrow gene (E)

The eyebrow gene is a recessive trait. A person only has a unibrow if they have two recessive alleles

(questions on back)

A) How many family members have unibrows?

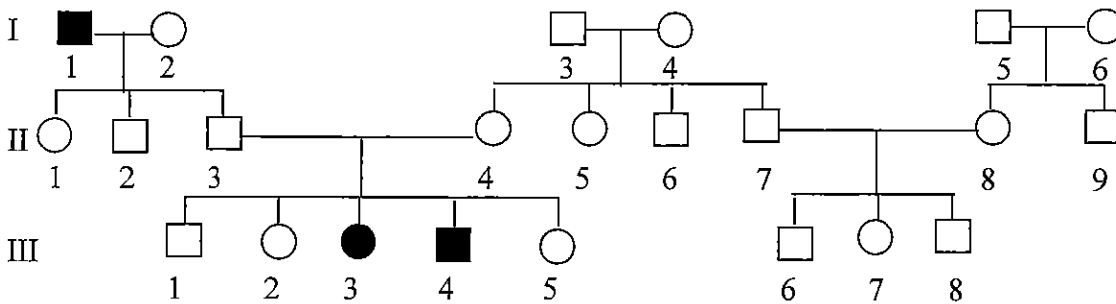
B) What is the genotype of individual # 4?

C) Are individuals #8 and # 9 homozygous or heterozygous?

C) What is the genotype of individual # 2?

For the following pedigree, the symbols are as follows:

- Siblings are placed in birth order from left to right and are labeled with numbers.
- Each generation is labeled with a Roman numeral.
 - Example: we would name an individual II-3 if he/she was in the second generation and the 3rd child born



Try to identify the genotypes of the following individuals using the pedigree above.
(homozygous dominant, homozygous recessive, heterozygous)

• III-3:

• I-1:

• II-1:

• II-4:

1. Is this trait dominant or recessive?

2. How can you know for sure that individuals II-3 and II-4 are heterozygous?