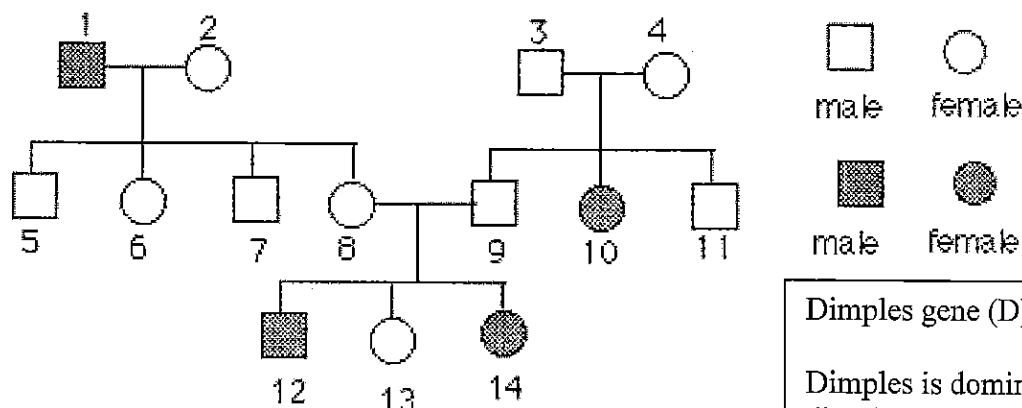


Genetics Pedigree Worksheet

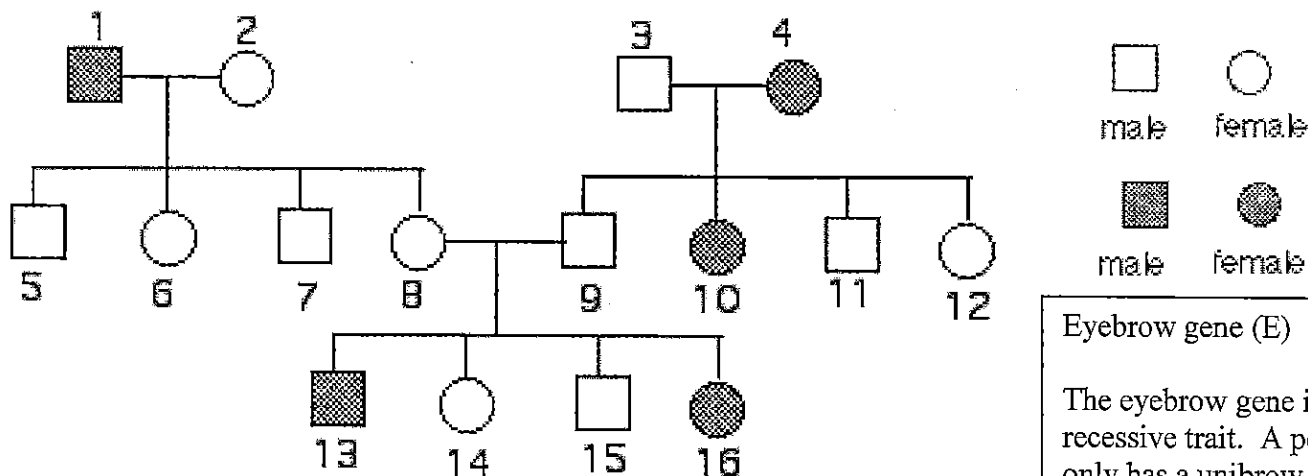
1. Use the below pedigree chart to answer the following questions about dimples. The Dimple gene controls whether a person has dimples or doesn't have dimples. Dimples is dominant to no dimples. Place the genotypes of each individual below its symbol.



Dimples gene (D)
Dimples is dominant to no dimples

- 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?

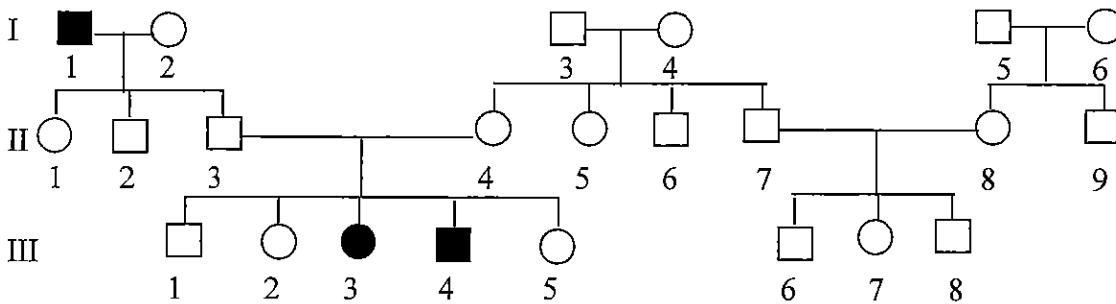
B) What is the genotype of individual # 4?

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?