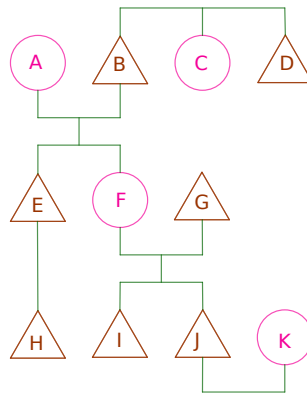


Family trees

Nghia Doan

December 10, 2022

Below you see an example of *family tree*. The circles denote female members and the triangles males.



A and B are married, as are F and G , and J and K .

B , C , and D are siblings, as are E and F . E and F are children of A and B .

Similarly, the parents of I and J are F and G . E is the father of H .

In addition, A is the grandmother of H , I , and J , F is the aunt of H , and C is the sister-in-law of A .

Inspector Jade asked six children to briefly introduce their brothers, sisters, and first cousins (cousins who share a grandparent.) She had to match the name of the child to each numbered position in the family tree with the responses as below. Note that the relations given are in local language. *Do not try to guess the genders of the children from the names. It might lead you to the wrong way.*

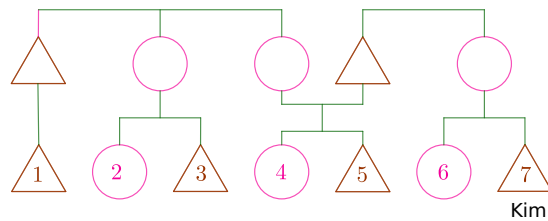
- I have three *arawa*: Kim, Minh, Thao
- I have two *surubu*: Oanh and Yen

- I have two *surubu*: Oanh and Yen
- I have one *ere*: Binh

- I have one *arawa*: Dinh
- I have one *surubu*: Binh

- I have one *ere*: Yen
- I have two *arawa*: Dinh and Thao

- I have two *surubu*: Yen and Binh
- I have two *arawa*: Minh and Dinh



Look at the cousins of the children 4 or 5, *arawa* or *suburu* rather related to the gender of the cousin than the gender of the cousin's father or the mother. Note that Binh is a *suburu* to Kim and Kim is an *arawa* to Binh. Thus, Binh and Kim are of opposite genders, so Binh is a girl. Hence, Binh is the girl number 4.

This means that Binh is not a *suburu* to the boy 5. Obviously, she is not an *arawa* to anyone. Since she is an *ere* to Dinh, Dinh must be her brother. Thus Dinh is the boy number 5.

Yen is a *ere* to Minh, so Yen is the girl number 2. Finally, Oanh is the girl number 6.

The answer is 1–Thao, 2–Yen, 3–Minh, 4–Binh, 5–Dinh, 6–Oanh, 7–Kim.