Halfsiblings = 0.25
Half nephew/niece = 0.06125
Halfsiblings + nephew/niece = 0.3125
Common ancestors: D and B
Increases with more ancestors

Inbreeding coefficient
The DNA % of an animal that descends from common ancestors. It ranges from 0 to 100%.

Relationship coefficient
The DNA % of two different animals descending from the same ancestor.

Mean Kinship (MK)
Average kinship of an animal with all other animals in the population. The lower its MK, the more important an animal is for the diversity of the breed.

Check which animals qualify as partner.
Selecting animals for breeding. Not only inbreeding and relationship are important. Animals can also be eliminated because they do not fit the breeding goal, or for example have problems with health, behaviour, conformation or genetic defects. Always look for a balance between selection for the breeding goal, inbreeding and relationship.

Determine relationship.
Calculate relationship between two animals. The (r) relationship and (F) inbreeding coefficients can be calculated if the pedigree is known. Inbreeding is half the relationship of the parents.

Choose animals with low relationship.
What if parents are unknown? If ancestors are unknown, you cannot calculate relationship. Look for other indications of relationship. For example, animals of the same breeder are more likely to have a higher relationship.

Look at the Mean Kinship.
When is inbreeding too high? A limit is difficult to determine. As a rule of thumb: the better the pedigree, the more ancestors are known, the higher the inbreeding. At least avoid common ancestors in the last three generations and choose animals with a low MK.

Pitfalls and misunderstandings.
1. Do not make inbred animals
2. Inbreeding is not heritable.
3. Inbreeding should be banned.
4. All animals are inbred if you go back far enough.
5. Do not mate carriers of genetic defects.
6. All animals carry genetic defects.
7. Inbreeding is actually good to capture genetic traits.
8. Unintentionally genetic defects are captured as well.