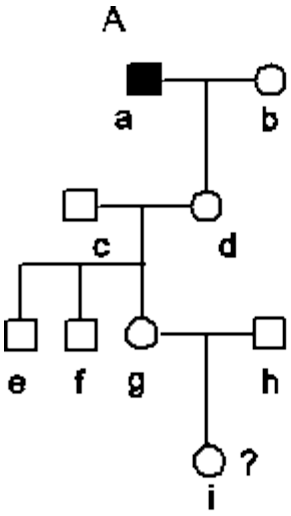
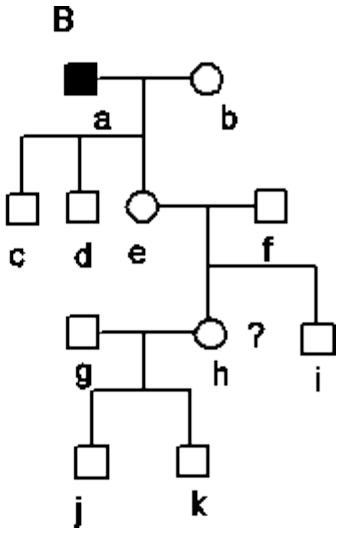
Q1 X-linked recessive disease

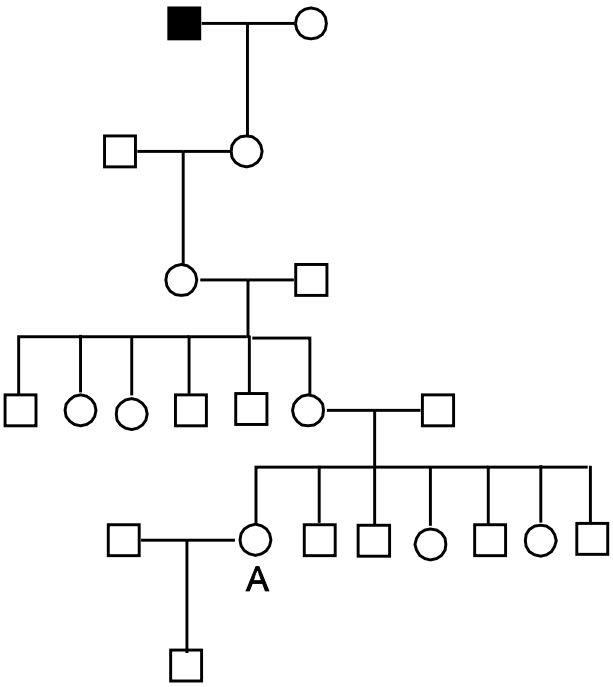
For pedigree **A**: what is the probability that "i" is a carrier? What is the risk for her next boy-child?

For pedigree **B**: what is the probability that "h" is a carrier? What is the risk for her next boy-child?



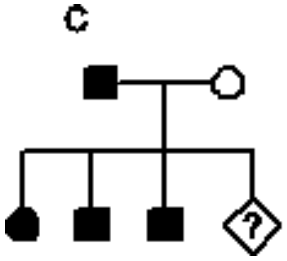


The same question for the following pedigree, person A



Q2 Dominant disease

Given a dominant disease with allele frequency of 0.03, what is the risk for next child?



Q3 Receswsive disease, more information

Considered pedigree with a recessive condition. Assume that the frequency of mutation in the population is very low, 0.2%. What is the risk for the "?" child? How it compares with populational risk of the disease (compute RR)? If both parents test negatively at the test with 70% sensivity, how this modifies the risk prediction and RR?