Here are the questions from [2.3 Building blocks of Bayesian models – Likelihoods, priors and posteriors - Quiz]

1. What would the prior be in our medical example?

Optional Answers:

    1. The probability that the patient has the disease after getting a positive diagnosis.

    2. The probability that the patient is correctly diagnosed with the disease.

    3. The probability/frequency of the disease in the general population.

    4. The probability that the patient is wrongly diagnosed with the disease.

2. In this example, the maximum a-Posteriori (MAP) estimate (Bayesian) and Maximum Likelhood (ML) estimate (Frequentist) differ. Why?

Optional Answers:

    1. The likelihood function is slightly different in MAP compared to ML.

    2. The methods make different observations.

    3. Compared to MLE, the MAP estimate takes prior knowledge into account which affects the estimate.

3. When we have a non-informative prior, the maximum a-Posteriori and maximum likelihood estimators are equivalent.

Optional Answers:

    1. true

    2. false

Thank You