## Stage 6 – Bayes' Theorem

- (6a) Put all your probabilities together in the formula for Bayes' theorem and calculate the posterior probability of each hypothesis given the evidence you have.
  - NB: Calculations are tedious to do by hand. Instead, use *Genie* and output a Bayesian network with probabilities for each hypothesis.<sup>1</sup>
- (6b) What is the most probable hypothesis given the evidence?
- (6c) Does this result agree with your initial guess in (1f) and your assessment in (4e)?
- (6d) Does this result differ from the prior probability in (3b)? Why is that?

<sup>&</sup>lt;sup>1</sup>You can download the academic version of Genie at *www.bayesfusion.com*. Since Genie works on Windows, if you are using Mac OS, you should first download PlayOnMac at *www.playonmac.com*.