

Naïve Bayes: Step 2

#4 Posterior Probability

✓ #3 Likelihood

✓ #1 Prior Probability

$$P(Drives|X) = \frac{\frac{1}{20} * \frac{20}{30}}{\frac{4}{30}} = 0.25$$

✓ #2 Marginal Likelihood

The diagram illustrates the calculation of the Posterior Probability, labeled as #4. It shows the formula $P(Drives|X) = \frac{\frac{1}{20} * \frac{20}{30}}{\frac{4}{30}} = 0.25$. Arrows point from the labels to the corresponding parts of the formula: #1 (Prior Probability) points to $\frac{20}{30}$, #2 (Marginal Likelihood) points to $\frac{4}{30}$, and #3 (Likelihood) points to $\frac{1}{20}$. A green checkmark is placed next to each label. The label #4 (Posterior Probability) is on the left, with an arrow pointing to the entire formula.