


► Class Prior Probability


$$\frac{p(D|\theta) p(\theta)}{p(D)} = p(\theta|D)$$

► Class Prior Probability

► Likelihood

The diagram illustrates the relationship between three probability distributions in a Bayesian model. The equation is presented as a fraction where the numerator consists of two adjacent colored boxes: a blue box containing $p(D|\theta)$ and a red box containing $p(\theta)$. The denominator is a green box containing $p(D)$. An arrow points from the text 'Likelihood' to the blue box, and another arrow points from 'Class Prior Probability' to the red box. The entire fraction is followed by an equals sign and a yellow box containing the posterior probability $p(\theta|D)$.

$$\frac{p(D|\theta) p(\theta)}{p(D)} = p(\theta|D)$$

► Class Prior Probability

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$$\frac{p(D|\theta) p(\theta)}{p(D)} = p(\theta|D)$$

► Predictor Prior Probability

► Class Prior Probability

► Likelihood

The diagram shows the equation for Bayes' theorem:
$$\frac{p(D|\theta) \cdot p(\theta)}{p(D)} = p(\theta|D)$$
 The terms are highlighted in colored boxes: $p(D|\theta)$ is in a blue box, $p(\theta)$ is in a red box, $p(D)$ is in a green box, and $p(\theta|D)$ is in a yellow box. Arrows indicate the following mappings: from 'Class Prior Probability' to $p(\theta)$, from 'Likelihood' to $p(D|\theta)$, from 'Predictor Prior Probability' to $p(D)$, and from 'Posterior probability' to $p(\theta|D)$.

$$\frac{p(D|\theta) \cdot p(\theta)}{p(D)} = p(\theta|D)$$

► Predictor Prior Probability

► Posterior probability