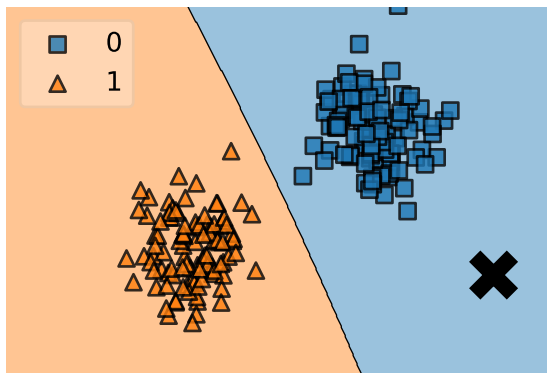
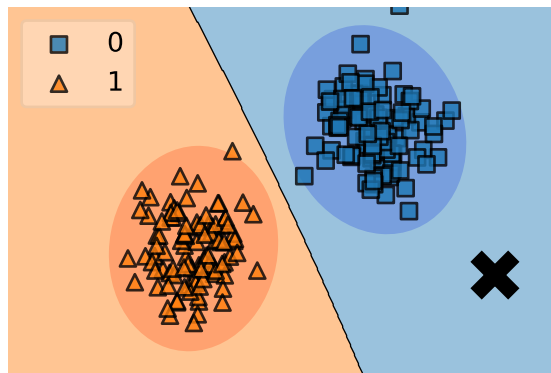


Data



$p(y|\mathbf{x})$

$p(\text{blue}|\mathbf{x})$ is high
= certain decision!



$p(\mathbf{x}, y) = p(y|\mathbf{x}) p(\mathbf{x})$

$p(\text{blue}|\mathbf{x})$ is high
and $p(\mathbf{x})$ is low
= uncertain decision!