

Hypothesis Set
 \mathcal{H}

Target Function
 $f : \mathcal{X} \rightarrow \mathcal{Y}$

Training Examples
 $\mathcal{D}_{\text{train}} = \{(\mathbf{x}_1, y_1), \dots, (\mathbf{x}_N, y_N)\}$

Learning
Algorithm
 \mathcal{A}

Final Hypotheses
 $h^* \approx f$