



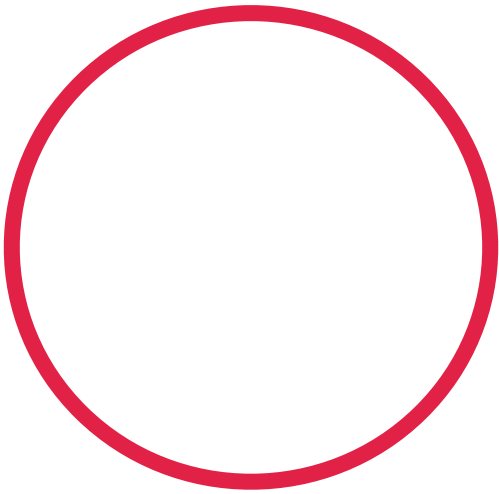
**Assessing Model Fit**

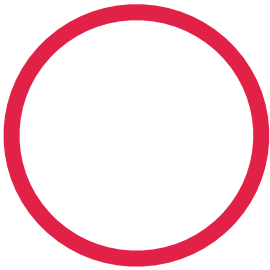
# Loss Function

a metric for model performance,  
lower values are better

(for now pretend that we have never heard of cross-validation)

$$Y \equiv f(X) + \epsilon$$





signal



**noise**

# Assessing Model Fit

$$Y = \underbrace{f(X)}_{\text{signal}} + \underbrace{\epsilon}_{\text{noise}}$$

## Loss Function

a metric for model performance,  
lower values are better

(for now we pretend that we have never heard of or seen cross-validation)

# Assessing Model Fit