



I think my coin is probably fair.

I *expect* roughly a 1:1 ratio of heads to tails or 50 heads for every 50 tails

Hypothesis: My coin is fair.

Question: Is my coin fair?

Observe (my experiment):

HHHTHHHTHTTH....

Observe (my data):

Heads	Tails
59	41

Question: How likely is it that this observation is a fluke?

Question: What is the probability of this event happening, given that my coin was fair?

Maybe my coin is biased? But how do I know?