

	Assertion True	Assertion False
Test Positive	Detection Rate (True Positives)	False Positives
Test Negative	False Negative	Specificity (True Negatives)

Table 5.14: There are four possible outcomes for a test that measures the truth or falsity of an assertion and two types of errors - false positives and false negatives. In the example described above, the assertion is that the fingerprint at a crime scene matches the fingerprints of an individual that is part of a database of fingerprints.

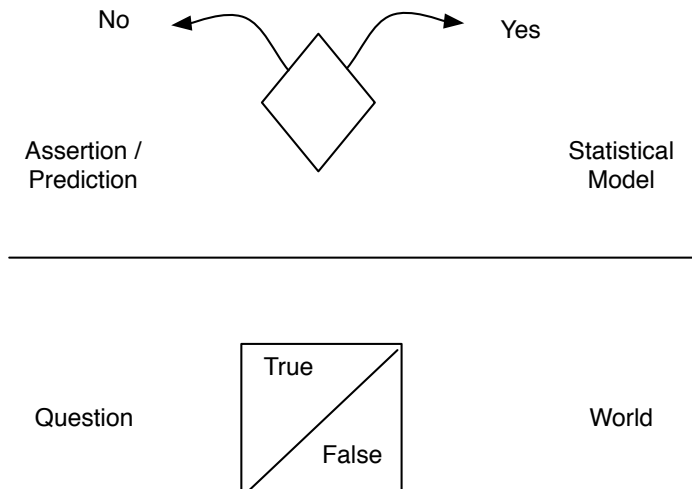


Figure 5.5: This diagram illustrates one way to think about statistical models. Suppose there is a credit card transaction and you are interested in determining whether the transaction is fraudulent or not. In this case, you can think of the statistical model as making predictions, such as whether the credit card transaction is fraudulent.