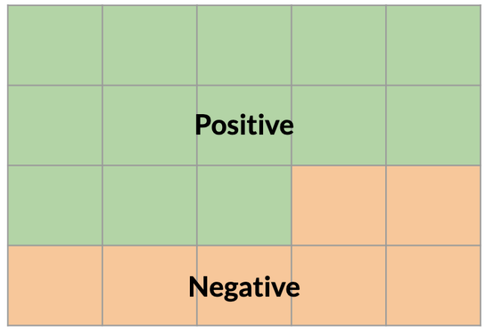
Probability and Bayes' Rule

You learned about probabilities and Bayes' rule.

Corpus of tweets

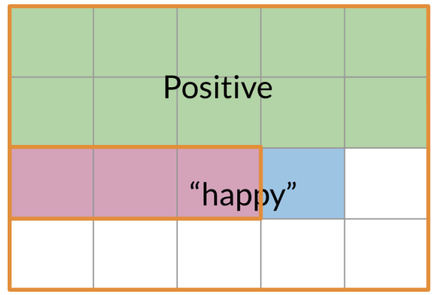


A → Positive tweet

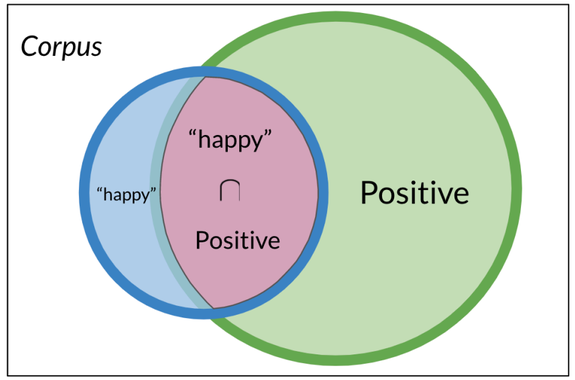
$P(A) = N_{pos} / N = 13 / 20 = 0.65$

P(Negative) = 1 - P(Positive) = 0.35

To calculate a probability of a certain event happening, you take the count of that specific event and you divide by the sum of all events. Furthermore, the sum of all probabilities has to equal 1.



$$P(A \cap B) = P(A, B) = \frac{3}{20} = 0.15$$



To compute the probability of 2 events happening, like "happy" and "positive" in the picture above, you would be looking at the intersection, or overlap of events. In this case red and blue boxes overlap in 3 boxes. So the answer is $\frac{3}{20}$.