1. Warm-up. If a team from the original NFL (like the Giants) wins the superbowl, the stock market goes up in that calendar year. If a team from the original AFL (like the Patriots) wins the superbowl, the stock market goes down. At least that’s been true 33 out of 41 times! Is this just lucky?

2. Two-sided alternate hypotheses – what does $p$-value mean? (Investigation 1.4)

   You can use \texttt{pbinom} or \texttt{binom.test(..., alt='two.sided')} here.

3. Confidence Intervals (Investigation 1.5) – Based on the data, what are plausible values of $\pi$?