

Application exercise FR.1: Frequentist inference review

Submit your responses on [Sakai](#), under the appropriate assignment. Only one submission per team is required. One team will be randomly selected and their responses will be discussed.

Earlier you decided how many M&Ms to buy, accordingly your sample is one of the following:

- $n = 5 \rightarrow$ RGYBO
- $n = 10 \rightarrow$ RGYBO BBGOY
- $n = 15 \rightarrow$ RGYBO BBGOY YRBRR
- $n = 20 \rightarrow$ RGYBO BBGOY YRBRR GORBY

Answer the following questions using your sample only.

1. What is your sample size? This is your n .
2. How many yellows are in your sample? This is your k .
3. Calculate the p-value using the Binomial distribution:
$$\text{p-value} = P(k \text{ or more yellows} \mid n, \% \text{yellow is } 10\%)$$
4. Do you reject the null hypothesis based on the α you chose earlier?
5. What is the conclusion of your hypothesis test, i.e. what do you report to your boss?