1. Find an example of probability involving "A or B" that is used in your chosen profession or real life.
   1. Explain the example.
   2. Are the events A and B in your example mutually exclusive?
   3. Which Addition Rule formula for P(A or B) applies? Be sure to cite the source of the information clearly.

Every two weeks my team completes a sprint (a time-boxed period of work) and delivers a product which will make its way to our public website in a release. Typically, a Friday marks either a release or the completion of a sprint. However, a release may be delayed due to a variety of issues which means the completion of a sprint could fall on the same day as a release. Thus, the completion of a sprint and a release are not mutually exclusive (Holmes et al., 2018). The Addition Rule expresses the probability of these events occurring minus the probability that they will occur simultaneously as *P(A* ∪ *B) = P(A) + P(B) - P(A ∩ B)* where A and B represent the events, ∪ indicates “or”, and ∩ symbolizes “and” (Holmes et al., 2018).

References

Holmes, A., Illowsky, B., & Dean, S. (2018). *Introductory Business Statistics* (1st ed.). OpenStax.